

"Ageism" in Personnel Selection

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Abstract

The present research involved two independent studies. The first study looked at "ageism" or age discrimination in selection interviews. The effects of applicant age, information exposure and job status were examined in the interview. The specific research question addressed was whether exposure to information about successful older workers would reduce discrimination against older employees in interview settings. This study was carried out with a sample of 61 managers. Prior to making selection decisions about a young applicant (25 years old) or an older applicant (48 years old), subjects read an article which contained either age-related information or neutral information. The age-related information was designed to mitigate against age bias. Videotaped job interviews were then viewed by the subjects who were required to make job performance evaluations and hire decisions about the applicant. Evidence of ageism against the old applicant was found. However as predicted, managers exposed to the age-related information gave significantly more favourable evaluations to the old applicant and were more willing to hire him than the young applicant. The second study addressed a very current research concern - the generalisability of findings in selection research using student samples to managerial samples. The same methodology was repeated with a sample of 119 undergraduate students. The results showed significant differences in students' selection decisions. The students exposed to age-related information gave more favourable ratings to the young applicant, and were not willing to hire the old applicant. The implications of these results are discussed.

CHAPTER ONE

Introduction

The effective use of human resources is critical to the efficiency and success of any organisation. This involves fair managerial policies and practices relating to employee recruitment, selection, placement, and promotion. Arguably, the most important human resource function is personnel selection - selection of the right person for the right job.

In recent years, there has been increasing concern about discrimination in personnel selection practices on the basis of race, sex, age and handicap. This concern is reflected in the growing body of research on 'organisational justice' in managerial practices, such as selection procedures (Singer, in press) and performance appraisals (Greenberg, in press-a; in press-b; Kanfer, Sawyer, Earley & Lind, in press; Landy, Barnes-Farrell & Cleveland, 1980; Landy, Barnes & Murphy, 1978). Equal Employment Opportunity (EEO) has become a major issue for recruiters and human rights legislators (e.g., The Race Relations Act, 1971; The Equal Pay Act, 1972; The Industrial Relations Act, 1973; The Human Rights Commission Act, 1977).

The main body of selection research has focused on bias in the employment interview. This work has examined racism (e.g., Bryd, 1980; Haefner, 1977; McDonald & Hakel, 1985; Mullins, 1982; Nolan, 1979; Parsons & Liden, 1984; Rand & Wexley, 1975; Wexley & Numeroff, 1975), and sexism (e.g., Cash, Gillens & Burns, 1977; Cohen & Bunker, 1975; Heilman & Martell, 1986; Shaw, 1972). Little attention has been given to the issue of "ageism" in

selection interviews (Arvey, 1979). "Ageism" is a popular term used to refer to age discrimination.

In the present research, two main issues were investigated. The first study examined ageism in the selection interview. Three variables were examined - applicant age, information exposure and job status in relation to the selection interview decisions of a group of experienced interviewers. A videotape methodology was employed.

The second study addressed an important methodological issue - the generalisability of findings from student samples to managerial samples. The issue of generalisability has become a 'hot' topic in organisational research, although the findings are mixed (e.g., Barr & Hitt, 1986; Bernstein, Hakel & Harlan, 1975; Dipboye, Fromkin & Wiback, 1975; Gordon, Slade & Schmitt, 1986; Guion, 1983; Hakel, Ohnesorge & Dunnette, 1970; Landy & Bates, 1973; Oakes, 1972). Study two was designed to investigate this problem using student interviewers. But, first a review of the selection interview research places the present research into context.

Literature Review

This literature review is presented in three sections. The first section examines the previous reviews of the selection interview research. The second section discusses the literature on age, including (1) the theory of stereotyping and the empirical evidence relating to age stereotypes, and (2) the literature on Age and Employment Decisions. Two types of employment decisions are considered : the effects of Applicant Age on Performance Evaluations and the effects of Applicant Age on Selection Decisions. Relevant theoretical perspectives and empirical findings are discussed.

Finally, a model of the selection interview is presented.

1.1 Previous Reviews of the Selection Interview Research

Over the past 70 years, the selection interview has been subjected to a great deal of criticism. Despite an accumulation of research indicating that the selection interview lacks reliability and validity (e.g., Mayfield, 1964; Schmitt, 1976; Ulrich & Trumbo, 1965; Wagner, 1949; Wright, 1969), the interview remains the most widely used selection device today (Arvey, 1979; Arvey & Campion, 1982; Dakin & Armstrong, 1988; Ryan & Sackett, 1987).

The first comprehensive review of the selection interview research was published by Wagner in 1949. Wagner concluded that the employment interview has limited reliability and validity (median correlation coefficient of .27 from 106 studies). However, he suggested that interview validity could be improved, with:

1. greater standardization of interview procedures - With better planning and organisation, Wagner felt that interviewers could gain the information needed to make valid decisions.
2. greater use of ancillary sources of information (e.g., on-the-job performance tests), in conjunction with the face-to-face interview.
3. a narrowing of the scope of the interview - Wagner argued that the selection interview is most useful in three situations :
 - a) where rough screening of applicants is acceptable,
 - b) where the number of applicants is too small to justify the use of more rigorous procedures,
 - c) where information can be evaluated more accurately by the interview than by other means.

Mayfield (1964) also noted the lack of validity in the interview. He felt that

research in this area would benefit from two new approaches. The first approach emphasised the decision making processes involved in selection decisions. Mayfield saw the need to identify the factors which influence these processes. The second approach advocated a move away from macroanalytic studies to microanalytic studies. The distinction between these two approaches is important. Macroanalytic research treats the interview as a whole. In contrast, microanalytic research divides the interview up into small, workable units, studying only one or two variables at a time (e.g., the effect of experienced and inexperienced interviewers on interview outcomes).

Mayfield noted a number of consistent findings in his review. Some of the most important of these findings were :

- a) Unstructured interviews have low validity and reliability.
- b) In unstructured interviews, interviewers tend to talk most.
- c) Structured interviews result in higher inter-rater reliability than unstructured interviews (e.g., Bass, 1951).
- d) Interviewers' predictions of an applicant's suitability based on interview and test results are no more accurate than those based on test scores alone (e.g., Meehl, 1954; Sarbin, 1942).
- e) Hire decisions are made early in the interview (Springbeet, 1958).
- f) Interviewers' attitudes bias judgements of the applicant.
- g) Interviewers are influenced more by negative or unfavourable information than positive information (e.g., Bolster & Springbeet, 1961; Rowe, 1963; Springbeet, 1958).
- h) Interviewers weight the same information differently (e.g., Asch, 1946; Webster, 1962; Wentworth, 1953).
- i) Intelligence is the only trait which can be validly assessed in the interview, but is more reliably measured by tests (e.g., Hanna, 1950; Wagner, 1949).

Ulrich and Trumbo (1965) also questioned the use of the employment interview as a valid device for selecting employees. They joined Wagner in his call for greater standardization of interview procedures and recommended the use of microanalytic studies. Ulrich and Trumbo also addressed two important issues. Firstly, they questioned the utility or cost-effectiveness of the interview. They described the employment interview as an "expensive and inefficient" tool, which failed to contribute significantly to the validity or utility of selection procedures. Like Wagner, they stressed the need to use other, frequently more reliable, sources of data. Secondly, they recommended that the scope of the interview be narrowed to consider two issues only - an applicant's social skills and career motivation. Ulrich and Trumbo claimed that information on abilities, aptitudes, and experience could better be gained from other sources and should not be considered in the interview.

Wright (1969) and Schmitt (1976) both reviewed the microanalytic studies investigating the decision making processes involved in the employment interview. Their reviews relied heavily on the significant empirical research carried out by Webster (1964) and his colleagues at McGill University (Arvey & Campion, 1982 p.286). After reviewing the literature from 1964, Wright's major recommendation was for a return to the macroanalytic approach to studying the interview. He felt that the inherent fragmentation of microanalytic research made it impossible to get an overview of the interview as a selection device. He also suggested that research should be combined with computer analysis and model-building techniques.

Schmitt (1976) also voiced concerns about the validity of the interview research. However, he was optimistic that inroads had been made in identifying the processes which contribute to poor generalisability and validity. Schmitt's review identified a number of specific variables which impact on interview decision making. These included :

1. *Negative/ Positive Information.*

Data suggests that interviewers are influenced more by negative information than positive information (Hollman, 1972; Webster, 1974). Also, it seems that interviewers reach a decision early in an interview, typically within the first four minutes (Springbeet, 1958).

2. *Interviewer Stereotypes.*

Interviewers possess stereotypes of "ideal" applicants against which real applicants are judged (Bolster & Springbeet, 1961; Hakel, 1971; Hakel, Hollman & Dunnette, 1970; Mayfield & Carlson, 1966; Rowe, 1966; Sydiaha, 1959, 1961). However, as Hakel et al. pointed out, there is considerable interviewer variation in stereotyping.

3. *Job Information.*

The use of job information decreases the effect of irrelevant factors on decisions (Weiner & Schneiderman, 1974). As interviewers receive more information about the job and about the applicant, inter-rater reliability increases (Langdale & Weitz, 1973).

4. *Sexual, Racial and Attitudinal Similarity.*

Results indicated that sex, race and attitudes affect evaluations of applicants, with similarity between interviewer and interviewee having a positive effect on selection outcomes (Baskett, 1973; Cohen & Bunker, 1975; Dipboye, Fromkin & Wiback, 1975; Ledvinka, 1971, 1972, 1973; Rand & Wexley, 1975; Sattler, 1970; Wexley & Numeroff, 1974).

5. *Visual Cues.*

Visual or non-verbal cues, such as facial expression and body position, are more important than verbal cues (Washburn & Hakel, 1973).

6. *Contrast Effects.*

Contrast effects influence interviewers' ratings of a job applicant. For example, the quality of the preceding applicants affect how the current applicant is evaluated (Carlson, 1968, 1970; Hakel, Ohnesorge & Dunnette, 1970; Rowe, 1967; Wexley, Sanders & Yukl, 1973; Wexley, Yukl, Kovacs & Sanders, 1972). Contrast effects also appear to influence the selection

interview outcome, although the findings are mixed (e.g., Carlson, 1968; Hakel et al., 1970; Latham, Wexley & Pursell, 1975; Rowe, 1967; Wexley et al., 1972).

Arvey's (1979) review examined the psychological and legal literature of selection interview bias against minority groups, such as blacks, females, the handicapped and the elderly. Arvey investigated two mechanisms which he felt contributed to bias in the interview : stereotyping (which will be discussed in more detail in the next section) and differential behaviour in the interview.

Arvey's review made a number of significant contributions to our understanding of unfair discrimination in the employment interview.

Some of his findings include :

- a) the mechanisms and processes that contribute to bias in the interview are not well specified by researchers,
- b) Female applicants tend to receive lower evaluations than males in resume studies (e.g., Cash, Gillen & Burns, 1977; Dipboye, Arvey & Terpstra, 1977; Dipboye, Fromkin & Wiback, 1975; Haefner, 1977; Rosen & Jerdee, 1974a; Shaw, 1972; Terborg & Ilgen, 1977), but this varies according to the position and other situational factors.
- c) There is only limited evidence indicating that blacks are treated unfairly in employment interviews (Haefner, 1977; Rand & Wexley, 1975; Wexley & Numeroff, 1975).
- d) Few studies have investigated interview bias against the elderly (Haefner, 1977; Rosen & Jerdee, 1976b) and the handicapped (Johnson & Heal, 1976; Krefting & Brief, 1977; Shaw, 1972).
- e) There is a relative dearth of research investigating the differential validity of the interview for minority and non-minority groups (Freytag, 1976; Kirkpatrick, Ewen, Barrett & Katzell, 1968; Lopez, 1966).
- f) The interview is wide open to legal attack and we can expect further

litigation in the future.

Finally, Arvey identified three research areas which need attention :

1. Methodological issues : Arvey criticised the continued use of resumé and paper-and-pencil methodologies in selection research. He argued that researchers need to make greater use of videotape and face-to-face interview designs. Arvey also felt that " real " interviewers need to be examined in these studies, rather than student subjects.
2. Research on Race, Age and the Handicapped: More research is needed to investigate interview evaluations of the elderly, the handicapped, and racial minorities.
3. Process Research: Arvey specified that more research is needed to determine the perceptual processes that influence interview outcomes.

Arguably, the most significant review of the selection interview research was published by Arvey and Campion (1982). Their paper was more optimistic about the future of the selection interview. They stated, "... it is clear that research dealing with the employment interview is progressing " (Arvey & Campion, 1982 p. 310). Two promising areas of research they proposed concerned : the use of board or panel interviews (Landy, 1976; Reynolds, 1979; Jackson, 1980) and interview questions based on job analysis and other relevant job information (Schmitt, 1976; Langdale & Weitz, 1973).

Arvey and Campion also outlined a number of themes which have emerged in the literature since 1975. These were as follows :

1. There has been an increase in research investigating bias in the interview.
2. Research continues to be microanalytic in nature, and a wider range of variables associated with the interview are being examined.
3. Research designs are becoming more sophisticated (e.g., use of videotapes and live interviews).
4. Researchers in this area have failed to apply Person-Perception models to

their work (e.g., Attribution models, Impression Formation theory). Arvey argued that Person-Perception theory provides a useful framework for organisational research.

5. The findings of this research should be translated into guidelines for interviewers and interviewees. Arvey and Campion (1982) contended that "there is a dearth of guidelines and suggestions concerning the improvement of interview effectiveness based on research findings". (p. 317).

Arvey and Campion (1982) also proposed a model of the employment interview. This model identifies a number of applicant characteristics, interviewer characteristics and situational factors which may influence selection interview decision making processes. This model will be discussed in more detail later in this review.

The most recently published review was that by Guion (1987). He outlined a number of changes in views for personnel selection research. Four important areas where changes have occurred are :

1. in the choice of predictors.

Like Arvey and Campion, Guion was optimistic about the future of the selection interview. He also emphasized the use of panel interviews and interview questions based on job analyses. However, Guion pointed to two further trends which he regarded as more promising. The first was a growing emphasis on idiographic research (i.e., use of policy - capturing methods). The second was the application of theories of social cognition to the interview process. He concluded, "Together, the use of idiographic research in the study of cognitive processes may change substantially our views about the value of interviews as predictors. But not yet". (Guion, 1987, p.202).

2. in choice of criteria.

Guion was less optimistic about the criteria often chosen in this research. He recommended a move away from reliance on ratings as criteria in selection research. He also noted that the choice of criteria (global or specific) must depend upon the particular research design.

3. methods of data collection.

Two changes noted by Guion were that researchers are now using much larger samples, and views about sample representativeness are more optimistic.

4. validation of selection procedures.

Guion called for validation of research studies combining three kinds of validity : criterion- related, content and construct validity, rather than reliance on a single validity coefficient. Guion felt that these changes would result in selection procedures which were highly valid (i.e., based on job-related criteria).

To conclude, this section has discussed a number of previous reviews of the selection interview research. Although the validity and generalisability of the interview have been severely criticised over the years, it remains the most popular and widely used selection device. Future research in this area should continue to be microanalytic in nature, isolating the process variables which impact upon the selection interview and which may cause bias. The information gained from this research is significant because it can be used to sensitize interviewers to the biases and limitations inherent within the selection process.

1.2 The Age Literature

(1) Stereotyping

This section examines the theory of stereotyping and the empirical evidence of age stereotypes, as they relate to the present study.

The Theory

Lippmann (1922) coined the term 'stereotype'. He claimed that "(h)umans do not respond directly to external reality (i.e. the 'outside world') but to a representation of the environment which is in a lesser or greater degree made by man himself " (p. 10). He saw stereotyping as a necessary part of cognition. Taylor, Fiske, Etcoff and Ruderman (1978), defined a stereotype as a set of attributes about a group and imputed to its members simply because they belong to that group. Thus, we find stereotypes based on race, sex, age, religion and many other factors.

The earliest stereotype research (Katz & Braly, 1933) involved an adjective check-list procedure. Subjects were given lists of adjectives such as lazy, friendly, cruel, foolish, and were asked to indicate the adjectives they felt were "typical" of particular group members such as Whites, Negroes or Germans. Stereotypes were made up from the set of common descriptors given to different groups. Thus, stereotypes were seen as oversimplified pictures of the world which enable humans to cope with the complexities and ambiguities of the environment.

More recently, stereotyping has been examined in relation to person perception. Stewart, Powell and Chetwynd (1979) argued that stereotyping is the most important process in person perception. These authors identified two main stereotypes : "self stereotypes" and "social stereotypes". "Self stereotypes" are based on the assumption that others are to a larger degree

similar to oneself. Thus, subjects ascribe traits to others as they would to themselves. "Social stereotypes" or cultural stereotypes imply a "constructive" process, whereby individuals evaluate others on the basis of generalised attributions and expectations. Social stereotypes determine the way we perceive and judge the behaviour, feelings, motives and abilities of others. But, as Heilman (1983) pointed out, :

The problem is that stereotypes about groups of people are often overgeneralisations and are either inaccurate or do not apply to the individual group member in question. In these cases, stereotypes become the basis for faulty reasoning leading to biased feelings and actions, disadvantaging (or advantaging) others not because of who they are or what they have done but because of what group they belong to (p.271).

Stereotyping (whether sex, age or ethnic stereotyping) is schema-driven. Schemata are "cognitive structures" central to information processing, and reflecting stereotypes and prejudice. They may be situation-based, person-based or category-based (Stephan, 1985). There is a volume of empirical evidence on stereotyping in the person perception literature. A number of these studies recognise the process of categorization in stereotyping. Secord (1959) has shown that, after subjects categorized a photograph as being of a white or a black person, they attributed various traits to the stimulus persons which corresponded to the respective stereotypes. Similarly, Razran (1950) found that subjects made a number of different trait judgements about individuals depending on whether information was present to allow ethnic group identification. Fiske and Cox (1979) found that the more obvious the defining features are (e.g., skin colour, age, sex, accent, attractiveness, and handicap), the more likely it is that people will be categorized into groups on the basis of these features.

One important form of bias which affects evaluations of group members is In-Group/Out-Group bias. As Stephan (1985) put it, :

One of the most intriguing consequences of categorization is that the mere division of people into groups leads to biased evaluations of the groups and their products and to discrimination in favour of in-group members (members of one's own group) and against out-group members (Stephan, 1985 p. 613).

For example, Brigham and Barkowitz (1978) found that blacks and whites more easily recognised faces of in-group members than out-group members.

Stephan (1985) explained that, because individuals have more experience with members of their own group, in-group schemata are more complex and result in moderate judgements. But, out-group schemata (which are less complex due to limited experience with out-group members) lead to extreme judgements, and negative attitudes and expectations. The processes central to stereotyping are, therefore, recognised as "very powerful determinants of attribution in person perception" (Stewart et al., 1979 p.14).

Age stereotypes

Age stereotypes refer to generalised beliefs about individuals in different age categories. Past gerontological research (e.g., Aaronson, 1966 ; Bennett & Eckman, 1973 ; Brubaker & Powers, 1976 ; Crockett, Press & Osterkamp, 1979 ; McTavish, 1971 ; Palmore & Manton, 1973) has suggested that people hold negative stereotypes about the elderly. In general, older people are considered to be slow, conservative, absent-minded, reserved, cautious and stable (Aaronson, 1966).

Age stereotypes have also been investigated in the employment context. Rosen and Jerdee (1976a) found evidence of negative stereotyping of older workers. In their study, subjects rated the "average" 30 year old person and the "average" 60 year old person on a number of characteristics, on four

employment dimensions. The older worker was rated lower on the dimensions of performance capacity (productivity , creativity) and potential for development (learning ability, versatility).

These findings highlight the serious consequences of discrimination in personnel decisions (selection, placement, promotion etc.) based on age stereotypes. If older employees are equally capable of performing jobs but are not perceived by management as being suitable , then this is evidence of age discrimination. Cleveland and Landy (1983a) asked the question ; are the differential evaluations of older workers based on true performance decrements or due to negative and incorrect beliefs about the abilities of older workers ?

Although the research findings in this area are contradictory (e.g., Baugher, 1978; Craft et al. 1979; Giniger, Dispenzieri & Eisenberg, 1983; Kutscher & Walker, 1960; Rhodes, 1983; Schwab & Henneman, 1979b; Waldman & Avolio, 1986), it appears that judgements are influenced largely by stereotypes of the older worker as slow, lacking in enthusiasm and unproductive. Stagner (1985) concluded that, "Most discrimination against aging employees is based on an erroneous perception of older persons as less capable, less efficient, less productive than their younger counterparts" (p.789). Because negative beliefs about older workers' capabilities can directly affect the treatment they receive in the employment context, the literature on age and employment is discussed.

(2) Age and Employment Decisions

The research on the relationship between age and employment decisions has, until recently, been limited. The research that has been undertaken has concentrated more on the effects of age on performance evaluations (e.g., Cleveland & Landy, 1983; Lee & Clemons, 1985; Rosen & Jerdee, 1976a, 1976b,

1977). Very few studies have looked at age effects on selection decisions. It is important to make this distinction. Performance evaluations are judgements of employees, frequently used to make decisions about promotions, training, salary increases and bonuses. Selection decisions are the final decisions on whether or not an applicant will be hired. Managers may evaluate an applicant's future job performance favourably, but will they hire the applicant ? Although these two decisions differ, they may both be subject to unfair bias.

A. The Effects of Applicant Age on Performance Evaluations

A number of studies have examined the relationship between applicant age and performance evaluations. Following on from their work on sex stereotypes, Rosen and Jerdee (1976a, 1976b, 1977), investigated the nature of "job-related age stereotypes". Using an in-basket methodology, subjects responded to "older employee" and "younger employee" versions of six hypothetical employment incidents in which age was expected to impact on their decisions. The six incidents developed from their earlier work (Rosen & Jerdee, 1976a) related to : resistance to change, lack of creativity, cautiousness, lower physical capacity , disinterest in technological developments and untrainability.

Rosen and Jerdee provided evidence of negative age stereotyping . Older workers were portrayed as being more resistant to change, lacking in creativity, overly cautious, and as having limited physical capacity and training potential. Overall, older employees were regarded as less suitable for employment than their younger counterparts.

In a similar study by Rosen and Jerdee (1977) subjects, (Harvard Business Review subscribers), responded to a number of memo-type hypothetical work situations relating to customer complaints, promotion and requests to

attend a seminar. Subjects were told the hypothetical employee was either 32 years old or 61 years old. From their results, Rosen and Jerdee made three major conclusions. Firstly, managers perceive older people to be more rigid and resistant to change than younger people. As a result, managers are much less likely to give older employees feedback which would improve their performance. Secondly, career development and retraining of older employees is overlooked by the majority of managers. Finally, older employees are less likely to be promoted into jobs which demand high levels of flexibility, creativity and motivation.

Cleveland and Landy (1983a) studied two types of bias in personnel decisions:

- a. stereotypes about the person (based on chronological age and performance pattern),
- b. stereotypes about the job (stereotypically young, stereotypically old, and age-neutral jobs).

They suggested that these two stereotypes may interact to affect award and promotion decisions. In this study the age of the target 'employee' was either 27, 40, or 61 years. Contrary to expectations (Rosen & Jerdee, 1976b), the results indicated no main effect for age or job stereotype. However, they did find a significant Age x Performance Pattern interaction, which suggests that when a person's age matches their pattern of behaviour, age stereotyping does occur.

More recently, Lee and Clemons (1985) assessed the effects of two factors : type of decision (absolute decision or comparison decision) and information (information or no information) on management decisions. The hypothetical decisions involved a request to attend a conference and a request to represent the department in a training programme. Hypothetical employees were either 32 years or 61 years old. The results indicated a significant main effect for both type of decision and information condition.

Increasingly favourable evaluations were made about the older worker when there was no comparison with a younger worker, and relevant job information was provided. These studies all suggest that increasingly negative decisions are made concerning older workers.

B. The Effects of Applicant Age on Selection Decisions

The research on the relationship between age and selection decisions is limited, to say the least. In his review, Arvey (1979), identified only two studies which have investigated the effects of applicant age on selection interview outcomes (Haefner, 1977; Rosen & Jerdee, 1976b). However, the Rosen and Jerdee article was incorrectly included as it does not consider selection interview decisions, but performance evaluations (as discussed earlier).

This review discovered a further five studies which have investigated age and hire decisions. Overall, the findings of this research are mixed. One study (Arvey, Miller, Gould & Burch, 1987) found that older candidates were preferred to younger candidates. Two studies, (Connor, Walsh, Litzelman & Alvarez, 1978; Fusilier & Hitt, 1983) found a non-significant effect. However, the most consistent finding was that increasing age had a significant negative effect on hire decisions (Craft, Doctors, Schkop & Benecki, 1979; Haefner, 1977; Triandis, 1963). In other words, younger applicants were preferred to older ones. This research shall be discussed in light of the contribution it has made to our understanding in this area.

The earliest study, by Triandis (1963) was the fore-runner to Haefner's (1977) study, but was overlooked in Arvey's review. Triandis examined the effects of six factors (competence, age, sex, race, sociability and wealth) on selection decisions. Subjects rated "paper people" who varied according to age, sex, race etc., and indicated whether they would hire the applicant. The results

revealed that subjects relied on competence, race and sociability information in their decisions. Age was also found to be an important factor for low level jobs (subjects did not want to hire a 55 year old section manager), but was ignored at higher levels.

Later, Haefner (1977) carried out a similar study in which race, sex, age and competence were examined as factors in employee selection. The results indicated that while race was not an important factor, competence, age and sex of the applicant did affect hire decisions. "The 25 year old worker was preferred over the 55 year old worker; males were preferred over females; highly competent candidates received a stronger recommendation than barely competent candidates " (Haefner, 1977, p. 199). In other words, the most favourable ratings were given to young, highly competent males.

In a further study, Craft et al. (1979) found that subjects were less willing to hire old workers than young workers (38.8% and 67.6% respectively). Reasons for not wishing to hire the older applicants were based on the issue of age, and expectations of a shortened working life. Craft et al. concluded : "These findings lend support to the previous limited research indicating that, though older workers may be perceived to be as capable as younger workers . . . they are less likely to be hired" (p.101).

In sum, these studies provide direct evidence of age discrimination in selection procedures. However, contradictory findings have been reported by a number of authors. In a study by Connor et al. (1978), subjects rated hypothetical female job applicants (24 years or 63 years) on the basis of a transcript of an interview. Connor et al. found no clear differences in ratings of young and old applicants. However, the hire decision ratings may have been affected because participants were told whether applicants had or had not actually been hired. As a result, the participants were less likely to hire the "not-hired" candidates than the "hired" candidates.

In a more recent study by Fusilier and Hitt (1983) student subjects rated the job application forms of a number of hypothetical applicants who varied according to age, race, sex and employment experience. Analyses revealed a significant main effect for employment experience, but no significant effects for age, race or sex. These results suggest that selection decisions are not affected by age bias.

Finally, a very recent study, Arvey et al. (1987), revealed some interesting findings. The authors collected interview judgements, gender and age data for job applicants interviewed for seasonal sales clerk positions over a two year period. It was found that interviewers did make differential predictions as a function of sex and age but the predictions were not in the expected direction. Instead, females and older applicants received higher initial interview evaluations and were more likely to be hired. However, this finding may be industry-specific. The study was carried out in a large American food chain, where females were more likely to be hired anyway. Similarly, older workers may have been preferred as they were seen as more stable workers.

A number of factors may help to explain the inconsistencies in the age and selection interview literature. One factor is the age of the applicants, per se. It may be that the differences in evaluations of the applicants are due to age differences in the literature. Studies investigating age effects in the selection interview have used a wide range of ages. For example, in three studies, the 'old' applicant was 55 years old (Fusilier & Hitt, 1983 ; Haefner, 1977 ; Triandis, 1963). But, Connor et al. (1979) chose the age of 63 years, and Craft et al. (1979) used three ages - 50, 60 and 70 years. The lack of age consistency, therefore, makes it very difficult to compare the results of these studies and to separate out different age effects.

Another possible explanation is that age may be considered an important

factor for certain types of jobs , but not for others. Three authors have examined age stereotyping in different jobs (Cleveland & Landy, 1983a, Singer, 1986; Triandis, 1963). Both Cleveland and Landy (1983a) and Triandis (1963) examined age stereotyping in intra-organisational positions. Triandis (1963) used three levels of job status - Company Director, Area Manager and Departmental manager. He found that age was important when subjects were considering the applicant for the departmental manager's job (which Triandis called a low status job), but was not important for the two higher status jobs. However, Triandis did not include any other positions, neither did he validate the three job status levels. Therefore, one must question the generalisability of his findings.

Cleveland and Landy (1983a) found that ratings given to employees varied according to the job stereotype (stereotypically young, stereotypically old or age neutral jobs) and person stereotype. Singer (1986) examined age stereotyping in relation to inter-organisational positions. She concluded that age stereotyping varies as a function of professions. Certain professions were considered stereotypically-younger person jobs (e.g., accounting) while other professions were seen as stereotypically-older person jobs (e.g., medicine). For this reason, job type was controlled in the present study by including a high status position of finance manager and a low status position of accounts clerk.

1.3 A Model of the Selection Interview

Arvey and Campion (1982) provided a model of the employment interview (see Figure 1) based on a similar model by Schmitt (1976).

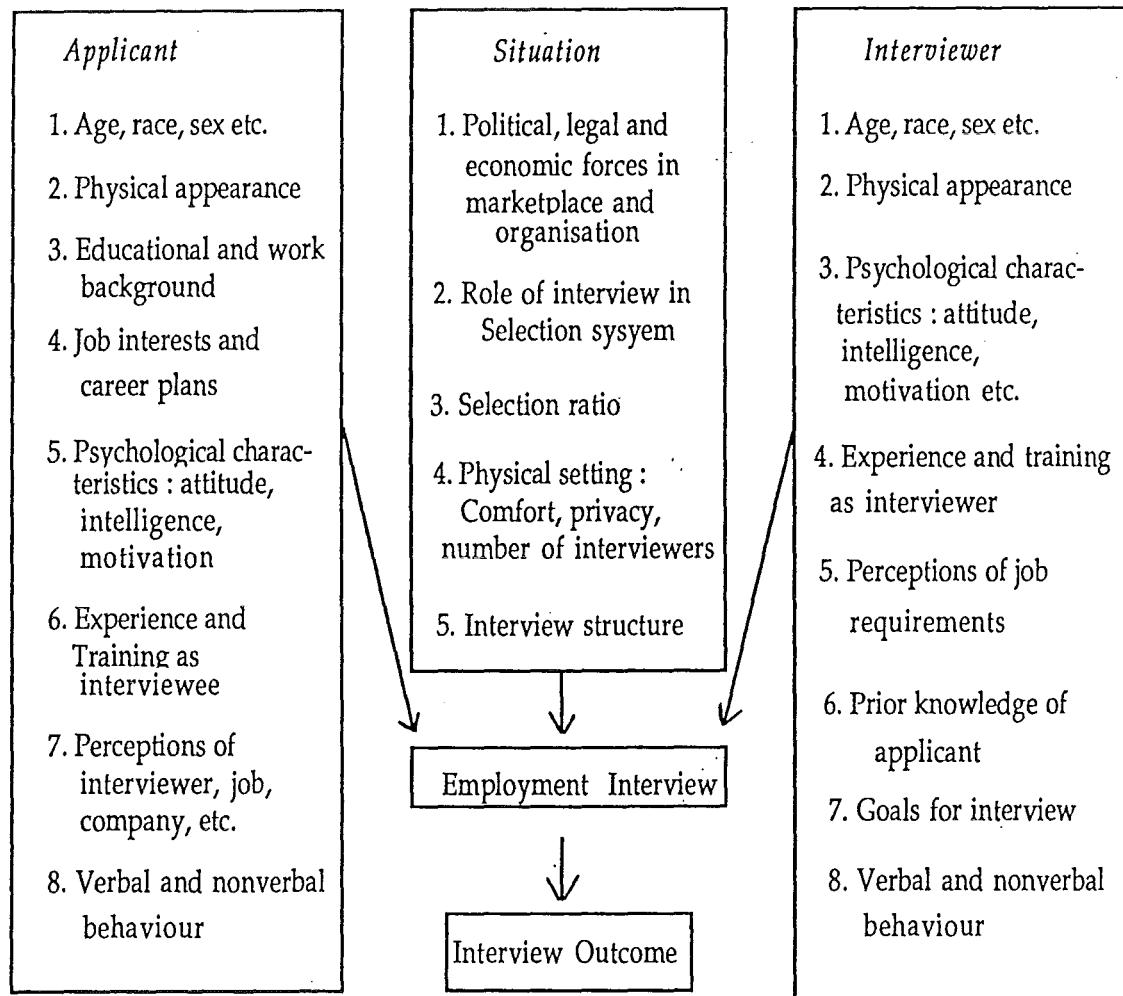
INSERT FIGURE 1 ABOUT HERE

This model outlines a number of applicant and interviewer characteristics

and situational factors which may influence interview evaluations and outcomes. Knowing the race and sex of an applicant, for example, may affect the interviewer's evaluation of the applicant and the subsequent interview outcome. This model is useful because it places the present study in the theoretical context of the selection interview research. It also recognises that there are a wide range of variables which impact upon the interview. Applicant age, examined in the present study, is only one of these variables.

Another advantage of the model is that it does not specify any causal relationships among the variables. Arvey and Campion (1982) explained that "we simply do not have sufficient knowledge, even after 60 years or so of research, to accurately pin-point causal relationships between these variables at the present time " (p. 282).

This model reveals two distinct classes of interviewee variables which may influence the interview process. The two classes involve job-related criteria and non job-related criteria (e.g., Kinicki & Lockwood, 1985). Job - related criteria include factors such as the applicant's education and work background, job interests and career plans. Non job-related criteria include applicant age, race and sex, physical appearance, verbal and non-verbal skills etc. As shown in the model, job irrelevant factors seem to play a greater role than job relevant factors in the employment interview. The distinction between these two classes of variables will be discussed in more detail later on, as they relate to this research. But, first the rationale and hypotheses for this study will be presented.

FIGURE 1**A Model of the Selection Interview**

Rationale

Recent demographic changes have meant that there are now more "old" people, either in the workforce or capable of working beyond retirement age. The issue of ageism in employment is, therefore, becoming a major concern. Unlike the U.S.A., where the Age Discrimination in Employment Act was introduced in 1962, New Zealand has not introduced any age legislation to protect workers from unfair selection practices. As a result, one must question the treatment of older workers in New Zealand industry.

The present study is the first of its kind to address two main issues: (1) Ageism in the selection interview, and (2) The generalisability of findings using student samples to managerial samples. Both of these issues have been neglected in previous selection research. It is also the first age discrimination study to employ a videotape methodology. This approach was used for several reasons. Firstly, videotaped interviews and live interviews appear to give similar results (Imada & Hakel, 1977). Secondly, previous sex and selection interview research has indicated that actually seeing the applicant has an impact on interview decisions (Ferris & Gilmore, 1977; Gorman, Clover & Doherty, 1978). One would also expect this to be the case for age and selection interview research. Finally, using videotapes allows for greater experimental control of possible confounding variables, such as applicant characteristics (e.g., verbal behaviour, NVB, physical appearance, clothing) and environmental factors, such as background noise and lighting.

Study One - Age Discrimination in Selection Interviews

Three independent variables were manipulated in study one. These were applicant age, information exposure and job status.

Applicant Age

Previous research on age, as discussed earlier, has revealed mixed findings. One of the main aims of this study was to determine whether there was any evidence of age discrimination in the selection interview, as reported by Craft et al. (1979), Haefner (1977) and Triandis (1963). Two ages were selected for the present study : 25 years and 48 years. These ages were chosen to represent a young applicant, recently graduated from university but with some work experience, and an older applicant. The age of 48 years was chosen, because the ages examined in most of the previous organisational research (e.g., Connor et al., 1978; Craft et al., 1979; Lee & Clemons, 1985; Rosen & Jerdee, 1977) were judged to be too old for the New Zealand situation where the retirement age is 60 years. This study was carried out with a group of 61 managers. On the basis of the previous age research, it was predicted that applicant age would have a significant effect on selection decisions.

Information Exposure

This study was also designed to test the effect of information exposure on selection decisions. The rationale for this part of the study was based on the findings of the sex discrimination research by Heilman and Martell (1986). These authors investigated the effect of information about *successful women* on recruiters' evaluations of female job applicants. They found that exposure to information about successful women can mitigate against subsequent sex bias in selection decisions. However, this occurs only when the information is perceived as being both :

1. Relevant (i.e., job or occupation-specific information), and
2. Representative (i.e., characters presented must not be seen to be unique or unrepresentative).

Heilman and Martell (1986) examined the effects of information about one

woman or a group of women, in an occupation directly related to the position about which their selection decisions were being made or in an unrelated occupation. They concluded that sex discrimination would not occur if information was provided about a *group* of successful women (not a solo woman) working in a *similar* industry.

These findings were interpreted by the authors in terms of information processing and discrimination. As discussed earlier, it appears that stereotyping (whether sex, age or ethnic stereotyping) is schema-driven. Schemata are very strong, pervasive cognitions which are based on long-term socialisation processes. As a result, they are very difficult to change. Heilman and Martell (1986) found that the effect of single female exposure was not strong enough to deter sex stereotyping, but repeated exposure was required.

These findings were applied to the present study to investigate whether age discrimination operates in the same way as sex discrimination. A neutral story (unrelated to age or work issues) acted as a control, and attempted to replicate the findings of Triandis (1963) and Haefner (1977). In other words, is there any evidence of age discrimination? An age-related story was included as the experimental manipulation to see whether information documenting a group of *successful older workers* would mitigate against subsequent age bias. The age-related information was expected to attack subjects' age stereotypes and to deter discrimination against older workers. It was predicted that information exposure would interact with age to affect selection decisions. Age-related information was expected to affect the selection decision ratings given to the older applicant, but to have no effect on the selection decision ratings given to the young applicant.

Job Status

Another purpose of this study was to examine the effects of job status on selection interviews. Previous research on ethnicity and the selection interview has shown that the type of job applied for affects selection decisions (e.g., Hopper, 1977; Hopper & Williams, 1977; Kalin & Rayko, 1978; Eder & Singer, in press). Only one earlier study has investigated the effects of age and job status on the selection interview. Triandis (1963) found that job status interacted with age in affecting interview decisions. Older applicants were preferred for high status jobs than low status jobs, while younger applicants were more likely to be hired for low status jobs. Job status was manipulated in the present study by using two levels - low status job of accounts clerk and high status job of finance manager. It was predicted that job status would also interact with age to affect selection decisions.

Study Two - Generalisability of Results

The Issue Of Generalisability

The second main aim of this study was to investigate the generalisability of results from the student sample to the managerial sample. A serious problem facing selection interview researchers is the issue of external validity or generalisability. Two methodological issues have received research attention in recent years (Arvey & Campion, 1986) :

1. The use of paper-and pencil stimulus interviews.
2. The use of college students as interviewers.

This study addresses the second issue.

1. The use of paper-and-pencil methodologies

The first issue concerns the generalisability of selection decisions based on paper-and-pencil methodologies, such as hypothetical application forms, resumes and transcripts of interviews, to those based on actual interviews

(e.g., Ferris & Gilmore, 1977; Gorman, Clover & Doherty, 1978; Okanes & Tschirgi, 1978). In the selection discrimination literature very few studies have considered the issue of external validity or have used improved methodologies such as videotaped selection interviews and live interviews.

2. The use of college students as interviewers

According to Carlson (1971) approximately 75% of social research has employed students as subjects, yet few have considered the problem of external validity. Is it possible to generalise findings from students who have "acted" as interviewers to "real" interviewers ?

Evidence of the generalisability of results from student samples in selection research is mixed. A number of studies (e.g., Bernstein, Hakel & Harlan, 1975; Dipboye, Fromkin & Wibach, 1975; Hakel, Ohnesorge & Dunnette, 1970) have concluded that the threat to generalisability in using students as experimental subjects is minimal. Bernstein et al. (1975) found no significant differences between managers and students except that the students were more lenient in their decisions. Only one study in the age literature has considered the issue of generalisability of results. Triandis (1963) compared the findings of student and managerial samples. He found no major differences between samples and concluded that generalisability was acceptable.

By contrast, Barr and Hitt (1986) noted significant differences between the two samples in the number and nature of factors used in making selection decisions. Also recently, Gordon et al. (1986) reviewed a total of thirty-two selection studies employing students and managers, and found important between-group differences. They argued that studies reporting similar findings for the two samples typically did not employ adequate statistical analyses of the data. Similar conclusions have been drawn by Guion, 1983; Landy and Bates, 1973; and Oakes, 1972.

The general conclusion from the most recent empirical research is that, :
 "Given the importance of empirical results to theory development and refinement, the paucity of research examining generalisability of student samples suggests that an assumption of similarity between student and managerial responses may not be warranted" (Barr & Hitt, 1986, p.600).
 As a result, it was essential to repeat the present methodology with a group of students (in study two) to see whether the findings obtained from the student sample are generalisable to the managerial sample.

Importance Ratings

The final purpose of the present study was to consider the underlying factors subjects considered important in their selection decisions. Past research has only required subjects to rate the employability of the applicants. No previous age research has examined these importance dimensions and whether they are reflected in subjects actual ratings of the applicant (Eder, 1986). Interest was in investigating whether subjects relied on job-relevant factors or job-irrelevant factors in their selection decisions (Kinicki & Lockwood, 1985). Subjects were required to assess the importance of several factors - clothing, physical attractiveness, qualifications, body language, age and experience - on their ratings. Given the lack of research in this area, it was not possible to suggest any specific hypotheses.

Hypotheses

Two independent studies were carried out. The first study was designed to consider the effects of applicant age, information exposure and job status in the selection interview. The second study was designed to consider the generalisability of findings using student samples to managerial samples. The hypotheses, developed from the previous literature were :

Study One - Managerial Sample

Hypothesis 1 - Applicant age would have a significant effect on selection interview ratings.

Hypothesis 2 - Exposure to age-related information would interact with age to affect selection interview ratings.

Hypothesis 3 - Job status would interact with age to affect selection interview ratings.

Study Two - Student Sample

Hypothesis 4 - Findings of selection interview research using a student sample would not generalise to a managerial sample.

CHAPTER TWO

Method

Two independent studies were carried out. Study one involved a managerial sample; Study two involved a student sample.

Study One - Managerial Sample

2.1 Subjects

65 managers participated in this study (18 females, 47 males; average age = 33 years). All subjects were, at the time, involved in management development programmes. 39 subjects were completing a 19 week 'Management Skills' course at the Canterbury Division of the New Zealand Institute of Management (NZIM). The remaining 27 subjects were involved in the Masters in Business Administration course (MBA) at the University of Canterbury. Research took place during four evening sessions. Five subjects were eliminated due to lack of prior experience in interviewing. Of the 61 managers who were included in this study, 18 were females and 43 were males. All subjects had some prior experience with selection interviews.

2.2 Design

The design of this study was a repeated measures $2 \times 2 \times 2$ (Age x Information Exposure x Job Status) factorial design. The three independent variables, each with two levels were :

1. Applicant Age : Young (25 years) or Old (48 years),

2. Information Exposure : Neutral or Age-related information.
3. Job Status : Low status (Accounts Clerk) or High status (Finance Manager).

Job Status was included as a within-subjects factor. Applicant Age and Information Exposure were both between-subjects factors.

This design resulted in eight cells (see Figure 2). The average number of subjects per cell was 15.

INSERT FIGURE 2 ABOUT HERE

2.3 Research Materials

Two sets of research materials were given to each subject during this study. The set for part one included a list of instructions, a story and a brief questionnaire. The story was either a neutral story or an age-related story. For part two, subjects were given a list of instructions and job descriptions, a curriculum vitae, two decision making questionnaires, and two importance rating scales. The videotaped selection interview was also included in part two of this study.

Part One :

a) Instructions : Brief instructions informed subjects that they were taking part in a preliminary study designed to help with the selection of reading material for a future research project (Heilman & Martell, 1986). Subjects were requested to read the attached magazine article and complete a brief questionnaire (see Appendix C).

FIGURE 2

Design of the Present Study

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL		
	AGE-RELATED		
OLD	NEUTRAL		
	AGE-RELATED		

b) Stories :

Two 'stories' or magazine articles were used in part one of this study.

One was a neutral story; the other an age-related story.

Neutral Story

The neutral story was totally unrelated to age or work issues. The article was taken from a contemporary New Zealand magazine ('North and South'), and modified to meet the length requirements of this study. This article documented the 100 year celebrations of National Parks in New Zealand. (See Appendix C). This story was presented to the subjects in the neutral condition.

Age - Related Story

The age-related story was created by this author. It focused on a hypothetical group of "successful older workers" involved in financial consultancy work in New Zealand. (See Appendix C). This story was presented to subjects in the information manipulation condition.

c) Questionnaire :

Subjects completed a brief questionnaire which examined their reactions to the magazine article. The questions related to the difficulty, clarity and interest of the article (Heilman & Martell, 1986).

Part Two :

a) Instructions and Job Descriptions :

A coversheet provided an introduction to the topic of decision making in selection interviews and outlined the procedure. Job descriptions summarised the activities required for the two positions, which varied in terms of job status. These included :

Accounts Clerk :

" The duties of Accounts Clerk involve preparation of monthly salaries and general administrative duties including day-to-day book-keeping, filing and accounts".

Finance Manager :

" The duties of Finance Manager involve directing and controlling all financial operations, overseeing annual budgets and expenditure analyses, and co-ordinating departmental and immediate subordinates".

These two positions were chosen to represent a high and low status job. This assumption was validated by a group of 160 first year Geography students (see manipulation check in Results section). Job descriptions were based on newspaper advertisements of vacancies, and were similar to those used by Eder (1986). Half of the subjects rated the applicant for the accounts clerk position first; half, the finance manager's position. This was to ensure that the order of presentation did not affect the ratings of the applicants for these positions.

b). Curriculum Vitae :

The C.V. outlined the applicant's personal information (age, marital status, number of children, place of birth), interests, education and recent work experience. The information was the same for both applicants except that the stated age was varied for the young and old applicant (25 years and 48 years respectively).

c) Videotaped Selection Interviews :

Two videotapes of an applicant being interviewed for a job were produced for this study; one showed a young applicant, the other an older

applicant.

The Actors

The same actors were used in the two videotapes. They were both acquaintances of the author. The "applicant" was a 27 year old, white male. The interviewer was a 35 year old, white male.

Clothing

The "young" applicant wore a sportscoat, grey trousers, white shirt and a tie. He had short hair and was clean shaven. The "old" applicant wore a grey three-piece suit, white shirt and a tie. He also had short hair and was clean shaven. The interviewer wore a dark suit in both videotapes.

Make-up

The old applicant was made to look his stated age with the use of make-up. His hair was dyed a light grey colour and soft wrinkles around his eyes, mouth and forehead were used to give the impression of age. The make-up was applied by a professional make-up artist. The age of the applicants was validated before the experiment took place to ensure that both applicants looked their stated ages (see manipulation check in the Results section).

The interview Script :

One script was written for all treatment conditions (young and old/ management position and accounts clerk position), and the actors learnt this script. The questions were based on those typically asked in a selection interview and those used by Eder (1986) and Gheselli (1966). The interview questions followed very closely the outline of the curriculum vitae, based on personal, academic and work-related questions (see Appendix D). The personal questions related to the applicant's age, place of birth, marital status, number of children, and personal interests. The age item was included to reinforce age as a salient feature (when combined with the age data on the C.V. and the visual presentation of age in the videotapes). The academic questions related to the university

the applicant had attended, and the degree completed. The work-related questions focused on recent work experience, reasons for seeking a new position, what the applicant could contribute to the job and when the applicant would be able to commence employment if offered the position. No questions were asked on past work experience as this would have confounded the job status variable.

Filming:

The filming took place in an office setting. The interviewer and applicant were seated opposite each other at a desk. The camera was placed approximately 3 metres away from them and was at eye-level height. The camera was angled so that the applicant was clearly visible and the interviewer could be seen side-on. Both of the completed videotapes were approximately four minutes long.

Non-Verbal Behaviour:

Interviewee non-verbal behaviour (e.g., eye contact, head nodding, smiling, hand gestures) does seem to impact on interview outcomes (Hollandsworth & Sadifer, 1979; Imada & Hakel, 1977; Rasmussen, 1984). Imada and Hakel (1977) and McGovern and Howard (1978) found that high levels of non-verbal behaviour resulted in more favourable ratings of applicants. In his review, Schmitt (1976) noted that non-verbal cues were more important than verbal cues. However, when qualifications and verbal content are good, the effects of non-verbal cues are reduced (Hollandsworth et. al., 1979 ; Rasmussen, 1984).

In the present study it was felt that, if non-verbal cues were not controlled, the chances of acceptance of the applicants may have been affected. As a result, non-verbal behaviour was kept to a minimum, in order to avoid confounding the experimental variables. Five non-verbal cues were considered : eye contact, smiling, head nodding, hand gestures, and leg movements. The applicant sat with his hands in his lap and his

feet flat on the floor. He was instructed to keep smiling, eye-contact and nodding to moderate levels. The actor learnt to display the appropriate levels of non-verbal behaviour. This was validated before the experiment took place, to ensure that there were comparable types and levels in both videotapes (see manipulation check in Results section).

d) The Questionnaires

After viewing the videotape, subjects were asked to evaluate the applicant on a number of dependent measures. Two questionnaires were designed for this purpose. The first was a Decision Making Questionnaire (DMQ), which asked subjects to evaluate the employment potential of the applicant on six decision making dimensions - suitability, fit in, success, competence, starting salary and a hire question. The second questionnaire was an importance rating scale (IRS) which examined the factors subjects considered important in their ratings of the applicant.

The Decision Making Questionnaire (DMQ) :

The DMQ consisted of six items : the first five items were performance evaluations of the applicant. Subjects were asked to indicate i) how suitable do you think the applicant is for employment on this job? ii) how well do you think the applicant would fit in with the organisation ? iii) how successful would you expect the applicant to be in this position ? iv) how competent do you think this applicant is ? v) select the starting salary you think best suits the applicant for this job. The sixth item was a hire dimension i.e. would you hire this applicant ? (see Appendix E). All items, except for the suitability dimension and the hire decision, were measured on 7- point Likert-type scales. A low score of 1 indicated a poor evaluation, a high score of 7 indicated a favourable evaluation. The suitability dimension was measured on a 25-point scale. The hire item was coded as 1= Yes, 7=No.

The Decision Dimensions

A. Performance Evaluations :

1. Suitability for employment

Applicant suitability has been investigated previously in selection research (e.g., Kinicki & Lockwood, 1985; Rosen & Jerdee, 1976b). In the present study the suitability item was measured on a 25-point Likert-type scale, where a low score reflected an unfavourable evaluation of the applicant and a high score reflected a highly favourable evaluation. This scale was first used by Wexley, Fugita and Malone (1975) and later by Eder (1986). The greater range of 1 - 25 enables subjects to be more discriminating when evaluating the applicants.

2. Fit In

The dimension of fit in was included because age was expected to affect perceptions of how well the applicant would fit into the organisation. To date, no other studies have considered how well applicants may fit in, on the basis of their age. However, an earlier study on race discrimination found that the applicant's ethnicity did affect the ratings of how well the applicant was seen to fit into the organisation (Eder, 1986).

3. Success

Age was also expected to affect perceptions of how successful the applicant would be on the job. This dimension relates to the previous two items.

Applicants judged to be suitable and to fit into the organisation well are also expected to be seen as successful. In any interview situation, the interviewer is trying to predict which applicants will be successful if hired.

4. Competence

The dimension of competence has been shown in previous age studies (e.g., Haefner, 1977; Triandis, 1963) to affect interview outcomes. Competence has

also been shown to interact with job status (Haefner, 1977).

5. Starting Salary

The starting salary item was included as a measure of "treatment discrimination" (Eder, 1986; Levitin, Quinn & Staines, 1971; Schwab & Heneman, 1978). This item was used to measure whether individuals would be treated differentially on the basis of their age, once they had gained access to an organisation (Levitin et. al., 1971). Starting salary recommendations have previously been examined in sex discrimination studies (e.g., Dipboye, Arvey & Tepstra, 1977; Heilman & Martell, 1986; Terborg & Ilgen, 1975). The salary scales for the two positions were taken from Eder's (1986) study of interview discrimination based on accent and ethnicity. The salary scale for the accounts clerk position was determined by consulting the current award rates. The management scale was based on the average salary paid for a similar position in the finance sector.

B. The Hire Decision

6. Hire

The hire item was included as an overall rating of the applicant. In any selection situation, the final decision made by the interviewer is whether or not to hire the applicant. Previous selection research has failed to distinguish between performance evaluations (e.g., of an applicant's suitability) and actual hire decisions. The present study separated these two types of decisions in order to examine the consistency in subjects' ratings.

The Importance Rating Scale (IRS) :

The IRS was designed to assess the factors subjects considered important in their ratings of the applicant. Subjects were asked " How important is

each of the following factors in determining your previous judgements" (on the DMQ) ? Six factors were considered: clothing, physical attractiveness, qualifications, body language, age and experience. Subjects rated the factors on 7-point Likert-type scales. A low score of 1 indicated the factor was extremely unimportant in subjects' evaluations. A high score of 7 indicated the factor was extremely important (see Appendix F).

The main aim of the IRS was to assess whether subjects judged age to be an important factor in selection interviews. From the previous research, it was expected that job irrelevant factors, such as age and physical attractiveness would be rated as more important than job relevant factors, such as qualifications and experience (Kinicki & Lockwood, 1985). The remaining two factors, clothing and body language were included as "filler items".

2.4 Procedure

During the research session, subjects were led to believe that they would be participating in two unrelated exercises. The two experimenters were introduced separately to the subjects and the materials for the two exercises were labelled distinctly.

Part One :

The first experimenter (a confederate of the author), explained to the subjects that they were taking part in a preliminary study designed to help with the selection of reading material for a future research project. They were asked to read and rate a magazine article. Subjects were led to believe that they were rating one of several different articles taken from contemporary magazines. Before rating the article, subjects were asked to indicate which of several topics (Nuclear Arms Control, Crisis in Education, Travel in Japan, The Older Worker, National Parks in New

Zealand) they had read. " This question which was apparently asked for clerical reasons, was designed to reinforce the belief that many different articles were being evaluated and, therefore downplay exposure manipulation and the interdependence of the two exercises" (Heilman and Martell, 1986 p. 381). Once the questionnaires were completed and collected the first experimenter thanked the subjects for their co-operation and left the room.

Part Two :

Next, the second experimenter (the author) informed the subjects that they would be taking part in an actual study looking at decision making in selection interviews. Subjects received the research materials for part two of the study, including a coversheet with instructions and job descriptions for two vacancies within a large finance corporation (Accounts Clerk and Finance Manager) ; a brief C.V., and two questionnaires.

After reading the cover sheet and C.V. subjects watched a short videotape of a selection interview, showing either a young or older applicant (corresponding with the age on the C.V.). Each subject saw only one applicant. Subjects were instructed to consider the applicant for the two positions and responded to the questionnaires (two copies of the DMQ and two copies of the IRS). When completed, the questionnaires were collected and the hypotheses explained . Then, the second experimenter thanked the subjects for their participation and left the room. Each research session lasted between 20 - 30 minutes.

Study Two - Student Sample

2.1 Subjects

126 undergraduate psychology students at the University of Canterbury participated in this study (73 females, 53 males; average age = 20 years). Research took place during class laboratory time. Seven subjects were eliminated due to incomplete questionnaires. Of the 119 students who were included in the study, 70 were females and 49 were males.

2.2 Design

The design of this study was also a repeated measures $2 \times 2 \times 2$ (Age x Information Exposure x Job Status) factorial design. The average number of students per session was 30.

2.3 & 2.4 Research Materials and Procedure

Exactly the same as for Study One.

CHAPTER THREE

Results

Results are given in three sections. First, the results of the Manipulation Checks are presented. This is followed by the results of the Decision Making Questionnaire, and the final section reports the results of the Importance Rating Scale. Computer analysis of the data was carried out using the Statistical Package for the Social Sciences (SPSSx) manova, and t-test programmes.

3.1 Manipulation Checks

A. Job Status :

Two levels of job status were required for this research - a low level job and a high level job. In order to select two positions which were appropriate, a group of stage one Geography students ($N = 160$, 71 females, 89 males) rated four jobs (Research officer, Accounts Clerk, Finance Manager, and Administrative Assistant) in terms of their status (see Appendix A). The job descriptions for the four positions, similar to those used by Eder (1986), were:

1. Research Officer - "Plans, organises and controls research and development work in conjunction with Research Manager, relating to development of technical processes, material utilization and research policies",
2. Accounts Clerk - "Prepares monthly salaries and undertakes general

administrative duties including day-to-day book-keeping, filing and accounts ".

3. Finance Manager - "Directs and controls all financial operations, oversees annual budgets and expenditure analyses and co-ordinates departmental and immediate subordinates ".

4. Administrative Assistant - "Assists with supervision and co-ordination of daily activities of workers engaged in clerical and related duties and administers office services ".

Responses were measured on 7-point Likert-type scales. A score of 1 indicated low status; a score of 7 indicated high status. The mean ratings obtained for the four positions were : 4.91 for the research officer, 3.04 for the accounts clerk, 5.47 for the finance manager, and 3.38 for the administrative assistant. These results indicate that the accounts clerk's job was considered a low status position and the finance manager's job was considered a high status position , $t(159) = 11.05$, $p < .001$. Consequently, these two positions were included in this study as high and low status positions.

B. The Stories :

The two stories used in part one of this study were rated by a group of 119 undergraduate students (70 females; 49 males) to ensure that they were similar in level of difficulty, clarity and interest (see Appendix C). The mean ratings obtained are presented in Table 1 .

INSERT TABLE 1 ABOUT HERE

T-tests were used to compare the two stories. The results indicated that there was little difference between the stories in : difficulty, $t(236) = 0.86$, n.s; clarity, $t(236) = .92$, n.s. or interest, $t(236) = -0.66$, n.s.

TABLE 1

Mean Ratings for the level of Difficulty, Clarity and Interest
in the two Stories

LEVEL	STORY	
	NEUTRAL	AGE-RELATED
DIFFICULTY	4.05 (.67)	3.93 (1.17)
CLARITY	3.83 (.76)	3.62 (.93)
INTEREST	2.86 (.92)	2.93 (1.01)

* Standard deviations are given in brackets

TABLE 2

Percentage Age Ratings for the Young and Old Applicant

APPLICANT	AGE CATEGORY		
	< 30 years	30-40	40+ years
YOUNG	80%	20%	0
OLD	0	3%	97%

TABLE 3

Mean Ratings for five categories of Non-verbal Behaviour
in the videotapes *

N.V.B.	VIDEOTAPE	
	ONE (YOUNG)	TWO (OLD)
EYE CONTACT	3.65 (1.40)	3.63 (1.33)
SMILING	1.64 (1.93)	1.53 (.32)
NODDING	1.64 (.65)	1.55 (.36)
HAND MOVEMENTS	1.20 (.99)	1.08 (.93)
LEG MOVEMENTS	1.09 (.13)	1.15 (.94)

* Standard deviations are given in brackets

C. The Videotapes :

i) Age Ratings

Both the 'young' and 'old' applicant were rated by a group of stage one psychology students ($N = 114$; 85 females and 29 males) to validate their stated ages (see Appendix B). The results are presented in Table 2.

INSERT TABLE 2 ABOUT HERE

The results showed that the young applicant was considered to be younger than 30 years of age by the majority of subjects (80%), and the older applicant was considered to be over 40 years of age by 97% of the sample. A chi-square test was performed to compare the two applicants. The results indicated that there was a significant difference in the age ratings for the two applicants ($\chi^2(113) = 210.73, p < .001$).

ii) Non-verbal Behaviour

An analysis of the non-verbal communication in the videotapes was carried out by the same group of stage one psychology students ($N = 114$; 85 females and 29 males). Subjects rated five categories of NVB : eye contact, smiling, nodding, hand gestures and leg movements, in the two videotapes (see Appendix B). The mean ratings are presented in Table 3.

INSERT TABLE 3 ABOUT HERE

Student's t-tests were calculated to compare each category of non-verbal behaviour in the two videotapes. The results indicated that the levels of NVB were very similar in the two tapes for all five categories :

Eye contact $t(226) = .11$ n.s.

Smiling $t(226) = .58$ n.s.

Nodding $t(226) = 1.29$ n.s.

Hands	$t(226) = .92$ n.s.
Legs	$t(226) = -0.66$ n.s.

3.2 Results of the Decision Making Questionnaire

Results are presented separately for the managerial sample (Study one) and the student sample (Study two).

Managerial Sample - Study One

The means for the decision dimensions are presented in Tables 4 to 9, for the eight treatment conditions. The six decision dimensions were suitability, fit in, success, competence, starting salary and hire.

INSERT TABLES 4-9 ABOUT HERE

A $2 \times 2 \times 2 \times 6$ (Age x Information Exposure x Job Status x Decision Dimensions) MANOVA with repeated measures on the last two factors and unequal cell sizes was performed on the data (see Appendix G). A significant main effect was obtained for Status ($F(1,57) = 11.88, p < .001$). The MANOVA results further indicate significant status effects for the dimensions of fit in ($F(1,57) = 12.94, p < .001$); competence ($F(1,57) = 28.25, p < .001$); starting salary ($F(1,57) = 10.94, p < .01$); and hire ($F(1,57) = 4.73, p < .05$). The main effect for Age was not significant ($F(1,57) = 1.04$ n.s.). The main effect for Information exposure was also not significant ($F(1,57) = .92$ n.s.). None of the interaction effects from the MANOVA were significant. However, the 3-way Age x Information x Status interaction was significant for the 'hire' dimension ($F(1,57) = 4.73, p < .05$).

The MANOVA main effect for job status indicates that selection decisions

TABLE 4

Mean ratings given by Managers for the Decision Dimension of Suitability*

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	17.18 (7.40) (n=11)	14.64 (5.05) (n=11)
	AGE-RELATED	11.75 (9.37) (n=24)	11.79 (5.05) (n=24)
OLD	NEUTRAL	11.13 (7.62) (n= 15)	16.00 (4.14) (n= 15)
	AGE-RELATED	11.55 (8.44) (n= 11)	13.91 (4.95) (n= 11)

* Standard deviations are given in brackets

TABLE 5

Mean ratings given by Managers for the Decision Dimension of Fit In*

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	4.00 (1.73) (n=11)	4.55 (1.21) (n=11)
	AGE-RELATED	3.46 (1.64) (n=24)	4.50 (1.10) (n=24)
OLD	NEUTRAL	4.00 (1.36) (n= 15)	4.87 (1.13) (n= 15)
	AGE-RELATED	3.18 (1.78) (n= 11)	3.91 (1.22) (n= 11)

* Standard deviations are given in brackets

TABLE 6

Mean ratings given by Managers for the Decision Dimension of Success*

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	4.36 (1.96) (n=11)	4.55 (1.13) (n=11)
	AGE-RELATED	3.79 (1.74) (n=24)	4.29 (1.33) (n=24)
OLD	NEUTRAL	3.73 (1.67) (n= 15)	5.07 (.88) (n= 15)
	AGE-RELATED	4.55 (2.34) (n= 11)	4.73 (.65) (n= 11)

* Standard deviations are given in brackets

TABLE 7

Mean ratings given by Managers for the Decision Dimension of Competence*

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	6.09 (.83) (n=11)	4.91 (.94) (n=11)
	AGE-RELATED	5.50 (1.32) (n=24)	4.46 (1.06) (n=24)
OLD	NEUTRAL	5.53 (1.06) (n= 15)	5.13 (.92) (n= 15)
	AGE-RELATED	6.09 (1.38) (n= 11)	5.18 (.87) (n= 11)

* Standard deviations are given in brackets

TABLE 8

Mean ratings given by Managers for the Decision Dimension of Starting Salary*

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	6.09 (1.04) (n=11)	4.55 (2.07) (n=11)
	AGE-RELATED	5.67 (1.79) (n=24)	4.50 (2.27) (n=24)
OLD	NEUTRAL	6.00 (1.13) (n= 15)	5.53 (1.60) (n= 15)
	AGE-RELATED	6.55 (.93) (n= 11)	5.36 (1.96) (n= 11)

* Standard deviations are given in brackets

TABLE 9

Mean ratings given by Managers for the Decision Dimension of Hire*

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	3.18 (3.03) (n=11)	4.27 (3.13) (n=11)
	AGE-RELATED	5.50 (2.65) (n=24)	4.00 (3.07) (n=24)
OLD	NEUTRAL	5.80 (2.48) (n= 15)	2.60 (2.75) (n= 15)
	AGE-RELATED	3.73 (3.13) (n= 11)	2.64 (2.80) (n= 11)

* Standard deviations are given in brackets

do vary according to the status of the job. For this reason, the data will be examined independently for both samples in the low status job of accounts clerk and the high status job of finance manager under the two information conditions. The data will also be reported separately for (a) performance evaluations (suitability, fit in, success, competence, starting salary), and (b) 'hire' decisions. T-tests for independent samples were calculated with reference to the hypotheses.

A. Neutral Condition

The neutral condition was included to examine whether there was any evidence of discrimination in subjects' selection decisions. Subjects in this condition were exposed to neutral information prior to making their selection decisions. The ideal way to replicate the literature would be to include a third condition with no information exposure. However, there was no reason to expect any differences between a 'no exposure' condition and a 'neutral exposure' condition, so only the latter was included. This replicates the method used by Heilman and Martell (1986) in their study of the effect of information exposure on sex discrimination.

i) Low Status Job (Accounts Clerk) :

(a) Performance Evaluations : For the dimension of suitability, the young applicant received significantly higher ratings ($\bar{M} = 17.18$) than the old applicant ($\bar{M} = 11.13$), $t(24) = 2.01$, $p < .05$. There were no significant differences in ratings of the young and old applicant on the other performance evaluation dimensions : fit in ($\bar{M} = 4.00$ for both applicants), $t(24) = .00$, n.s; success ($\bar{M} = 4.36$ for the young applicant and 3.73 for the old), $t(24) = .88$, n.s; competence ($\bar{M} = 6.09$ and 5.53 respectively), $t(24) = .26$, n.s; and starting salary ($\bar{M} = 6.09$ and 6.00), $t(24) = .23$, n.s.

(b) Hire Decisions : The t-test result indicates that the managers preferred to hire the young applicant for the clerk's job ($\bar{M} = 3.18$) rather than the older applicant ($\bar{M} = 5.80$), $t(24) = -2.40$, $p < .01$. Discrimination was against the old

candidate.

ii) High Status Job (Finance Manager) :

(a) Performance Evaluations : There was no evidence of discrimination or preference in the managers' evaluations of the applicants for the management position. There were no significant differences in ratings given to the young applicant or the old applicant on any of the performance evaluations : suitability, (\underline{M} =14.64 and 16.00 respectively), $t(24) = -.75$, n.s; fit in (\underline{M} = 4.55 and 4.87), $t(24) = -.68$, n.s; success (\underline{M} = 4.55 and 5.07), $t(24) = -1.18$, n.s; competence (\underline{M} = 4.91 and 5.13), $t(24) = .59$, n.s; and starting salary (\underline{M} =4.55 and 5.53), $t(24) = -1.36$, n.s. Both of the applicants were rated equally.

(b) Hire Decisions : The t-test result for the hire dimension indicates no hire preferences for the young (\underline{M} = 4.27) or old (\underline{M} =2.60) applicant, $t(24) = 1.24$, n.s. The managers did not discriminate against either applicant.

B. Information Exposure Condition

The information exposure condition was included as a measure of the experimental manipulation. The subjects in this condition were exposed to age-related information prior to making their selection decisions.

i) Low Status Job (Accounts Clerk) :

(a) Performance Evaluations : There were no significant differences in ratings given to the young or old applicant on any of the performance evaluation dimensions : suitability (\underline{M} =11.75 and 11.55 respectively), $t(33) = .06$, n.s; fit in (\underline{M} =3.46 and 3.18), $t(33) = .46$, n.s; success (\underline{M} =3.79 and 4.55), $t(33) = -1.09$, n.s; competence (\underline{M} = 5.50 and 5.09), $t(33) = -1.23$, n.s; and starting salary (\underline{M} = 5.67 and 6.55), $t(33) = -1.54$, n.s. In other words, the managers did not consider one applicant to be more 'employable' than the other.

(b) Hire Decisions : For the hire dimension, the old applicant received lower (more favourable) ratings (\underline{M} = 3.73) than the young applicant (\underline{M} = 5.50), $t(33) = 1.75$, $p < .05$. Thus, the managers preferred to hire the older applicant

for the accounts clerk job.

ii) High Status Job (Finance Manager) :

(a) Performance Evaluations : For the dimension of competence, the old applicant received significantly higher ratings ($\bar{M} = 5.18$) than the young applicant ($\bar{M} = 4.46$) when applying for the job as finance manager, $t(33) = -2.00$, $p < .05$. Thus, the older applicant was seen as being more competent.

There were no significant differences in ratings given to the young or old applicant on the other performance evaluation dimensions : suitability ($\bar{M} = 1.1.79$ and 13.91 respectively), $t(33) = -1.17$, n.s; fit in ($\bar{M} = 4.50$ and 3.91), $t(33) = 1.44$, n.s; success ($\bar{M} = 4.29$ and 4.73), $t(33) = -1.05$, n.s; and starting salary ($\bar{M} = 4.46$ and 5.18), $t(33) = -1.09$, n.s.

(b) Hire Decisions : The t-test result indicates that the managers had no hire preferences between the young ($\bar{M} = 4.00$) and the old applicant ($\bar{M} = 2.64$), $t(33) = 1.26$, n.s. They did not discriminate against either applicant.

Student Sample - Study Two

The means for each of the decision dimensions - suitability, fit in, success, competence, starting salary, and hire - are presented in Tables 10 to 15, for the eight treatment conditions.

INSERT TABLES 10-15 ABOUT HERE

A $2 \times 2 \times 2 \times 6$ (Age \times Information Exposure \times Job Status \times Decision Dimensions) multivariate analysis of variance (MANOVA) with repeated measures on the last two factors and unequal cell sizes was performed on the data (see Appendix G). A significant main effect was found for Applicant Age ($F(1,115) = 6.07$, $p < .001$). The MANOVA results further indicate a significant age effect for the decision dimension of starting salary ($F(1,115) = 29.50$, $p < .01$). The main effect for Status was highly significant ($F(1,115) = 12.46$, $p < .001$). Significant status effects were found for the decision

TABLE 10

Mean ratings given by Students for the Decision Dimension of Suitability *

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	13.90 (6.75) (n=29)	13.83 (4.14) (n=29)
	AGE-RELATED	17.18 (4.85) (n=34)	15.71 (4.80) (n=34)
OLD	NEUTRAL	13.03 (5.10) (n= 30)	16.87 (4.79) (n= 30)
	AGE-RELATED	12.92 (6.44) (n= 26)	13.85 (4.54) (n= 26)

* Standard deviations are given in brackets

TABLE 11

Mean ratings given by Students for the Decision Dimension of Fit In *

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	3.83 (1.25) (n=29)	4.31 (1.07) (n=29)
	AGE-RELATED	4.77 (1.25) (n=34)	5.15 (1.31) (n=34)
OLD	NEUTRAL	4.50 (1.43) (n= 30)	5.13 (1.22) (n= 30)
	AGE-RELATED	3.69 (1.38) (n= 26)	4.04 (1.04) (n= 26)

* Standard deviations are given in brackets

TABLE 12

Mean ratings given by Students for the Decision Dimension of Success *

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	4.45 (1.88) (n=29)	4.55 (.95) (n=29)
	AGE-RELATED	4.85 (1.28) (n=34)	5.09 (1.42) (n=34)
OLD	NEUTRAL	4.93 (1.31) (n= 30)	5.20 (1.22) (n= 30)
	AGE-RELATED	4.46 (1.75) (n= 26)	4.62 (1.10) (n= 26)

* Standard deviations are given in brackets

TABLE 13

Mean ratings given by Students for the Decision Dimension of Competence *

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	5.35 (1.26) (n=29)	4.69 (1.11) (n=29)
	AGE-RELATED	5.94 (.74) (n=34)	5.29 (1.19) (n=34)
OLD	NEUTRAL	5.30 (1.06) (n= 30)	5.23 (1.04) (n= 30)
	AGE-RELATED	5.35 (1.36) (n= 26)	5.04 (1.15) (n= 26)

* Standard deviations are given in brackets

TABLE 14

Mean ratings given by Students for the Decision Dimension of Starting Salary *

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	5.45 (1.45) (n=29)	3.66 (1.61) (n=29)
	AGE-RELATED	5.68 (1.55) (n=34)	3.91 (2.09) (n=34)
OLD	NEUTRAL	5.67 (1.18) (n= 30)	5.27 (1.68) (n= 30)
	AGE-RELATED	6.42 (.81) (n= 26)	5.92 (1.20) (n= 26)

* Standard deviations are given in brackets

TABLE 15

Mean ratings given by Students for the Decision Dimension of Hire *

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	4.52 (3.01) (n=29)	4.72 (2.96) (n=29)
	AGE-RELATED	4.00 (3.05) (n=34)	2.94 (2.85) (n=34)
OLD	NEUTRAL	4.60 (2.99) (n= 30)	1.80 (2.07) (n= 30)
	AGE-RELATED	5.62 (2.58) (n= 26)	5.62 (2.58) (n= 26)

* Standard deviations are given in brackets

dimensions of fit in ($F(1,115) = 11.72, p < .01$); competence ($F(1,115) = 11.81, p < .01$); starting salary ($F(1,115) = 36.89, p < .01$); and hire ($F(1,115) = 6.92, p < .01$). The overall main effect for Information Exposure was not significant ($F(1,115) = 1.90$ n.s.). However, a significant information effect was obtained for the dimension of starting salary ($F(1,115) = 5.05, p < .05$).

Two significant 2-way interactions were obtained. The Age \times Information interaction was significant ($F(1,115) = 5.76, p < .001$) for the dimensions of suitability ($F(1,115) = 9.13, p < .01$); fit in ($F(1,115) = 24.15, p < .01$); success ($F(1,115) = 7.36, p < .01$); competence ($F(1,115) = 4.16, p < .05$); and hire ($F(1,115) = 22.16, p < .01$). The Age \times Status interaction was also significant ($F(1,115) = 3.53, p < .01$). Significant interaction effects were obtained for the dimensions of suitability ($F(1,115) = 5.49, p < .05$) and starting salary ($F(1,115) = 13.11, p < .01$). The Information \times Status interaction was not significant ($F(1,115) = .69$ n.s.). The Age \times Information \times Status interaction was also not significant ($F(1,115) = 1.54$ n.s.).

The MANOVA main effect and interaction effect for job status indicate that selection decisions do vary according to the status of the job. Similarly, the MANOVA age main effect and the age and information interaction effect indicate that selection decisions are affected by applicant age and the type of information exposure. For this reason, the data will be examined independently for the low status job and the high status job, under the two information conditions. T-tests for independent samples were calculated with reference to the specific hypotheses.

A. Neutral Condition

i) Low Status Job (Accounts Clerk) :

(a) Performance Evaluations : There was no evidence of discrimination in the students' performance evaluations of the two applicants. The t-test results were not significant for the young applicant or the old applicant on

the dimensions of suitability (\bar{M} = 13.90 and 13.03 respectively), $t(57) = .55$, n.s; fit in (\bar{M} = 3.83 and 4.50), $t(57) = -0.76$, n.s; success (\bar{M} = 4.45 and 4.93), $t(57) = -1.12$, n.s; competence (\bar{M} = 5.35 and 5.30), $t(57) = .16$, n.s and starting salary (\bar{M} = 5.45 and 5.67), $t(57) = -0.63$, n.s. Thus, when applying for the job of accounts clerk, both applicants received similar performance evaluations.

(b) Hire decisions : The t-test result for the hire dimension was not significant, $t(57) = -0.10$, n.s when the young (\bar{M} = 4.52) and the old applicant (\bar{M} = 4.60) were applying for the accounts clerk job. In other words, subjects did not discriminate against either applicant in their hire decisions.

ii) High Status Job (Finance Manager) :

(a) Performance Evaluations : The results of the t-tests indicate that the old applicant received higher ratings than the young applicant on all of the dimensions : suitability (\bar{M} = 16.87 and 13.83 respectively), $t(57) = -2.55$, $p < .01$; fit in (\bar{M} = 5.13 and 4.31), $t(57) = -2.73$, $p < .01$; success (\bar{M} = 5.20 and 4.55), $t(57) = -2.24$, $p < .05$; competence (\bar{M} = 5.23 and 4.69), $t(57) = -1.92$, $p < .01$; and starting salary (\bar{M} = 5.27 and 3.66), $t(57) = -3.66$, $p < .01$. In other words, there was evidence of discrimination in favour of the older applicant. He was seen as more suitable, successful, competent, fitting in better and worthy of a higher starting salary than the younger applicant.

(b) Hire Decisions : Consistent with the performance evaluations, the older applicant was given more favourable (lower) ratings (\bar{M} = 1.80) than the young applicant (\bar{M} = 4.72) for the hire dimension, $t(57) = 4.36$, $p < .01$. The students preferred to hire the old applicant rather than the young applicant for the management position. Thus, discrimination was in favour of the old applicant.

B. Information Exposure Condition

i) Low Status Job (Accounts Clerk) :

(a) Performance Evaluations : The results of the t-tests indicate that the young applicant received significantly higher ratings than the old applicant

for the dimensions of suitability (\underline{M} = 17.18 and 12.92 respectively), t (56) = 2.82, $p < .01$; fit in (\underline{M} = 4.77 and 3.69), t (56) = 3.09, $p < .01$; and competence (\underline{M} = 5.94 and 5.35), t (56) = 2.11, $p < .05$. For the dimension of starting salary, the old applicant received higher ratings (\underline{M} = 6.42) than the young applicant (\underline{M} = 5.68), t (56) = -2.11, $p < .05$. For the dimension of success, the result was not significant. The means obtained were 4.85 for the young applicant and 4.46 for the old applicant, t (56) = .95, n.s. Overall, therefore, the young applicant was rated more favourably than the old applicant.

(b) Hire Decisions : The young applicant was given more favourable (lower) ratings for the hire dimension (\underline{M} = 4.00) than the old applicant (\underline{M} = 5.62), t (56) = -2.10, $p < .05$. Thus, the young applicant was more likely to be hired for the job of accounts clerk than the old applicant.

ii) High Status Job (Finance Manager) :

(a) Performance Evaluations : For the dimension of fit in, the young applicant was rated more favourably (\underline{M} = 5.15) than the old applicant (\underline{M} = 4.04), t (56) = 3.47, $p < .01$. For the dimension of starting salary, the old applicant received higher ratings (\underline{M} = 5.92) than the younger applicant (\underline{M} = 3.91), t (56) = -3.62, $p < .01$. There were no significant differences in ratings for the young applicant or the old applicant on the dimensions of suitability (\underline{M} = 15.71 and 13.85 respectively), t (56) = 1.48, n.s; success (\underline{M} = 5.09 and 4.62), t (56) = 1.34, n.s; and competence (\underline{M} = 5.29 and 5.04), t (56) = .78, n.s.

(b) Hire Decisions : The t-test results indicate that the students preferred to hire the young applicant for the low status job (\underline{M} = 2.94) than the old applicant (\underline{M} = 5.62), t (56) = -3.62, $p < .01$.

Overall mean ratings given by managers and students for the decision dimensions in the Decision Making Questionnaire are presented in Table 16.

INSERT TABLE 16 ABOUT HERE

Summary

A summary of the DMQ results for the two subject samples is presented in Table 17.

INSERT TABLE 17 ABOUT HERE

From the table, four main issues can be indentified. These include : the issue of age discrimination; the effect of information exposure; the effect of job status; and the consistency of ratings between performance evaluations and hire decisions. Each issue shall be examined separately, with reference to Table 17.

1. The Issue of Age Discrimination

The first issue refers to age discrimination in the employment interview. Evidence of age discrimination in subjects' interview ratings can be obtained by examining the hire decisions in the neutral condition. In the present study, two clear-cut findings were obtained (see Table 17). Firstly, there was positive evidence of age discrimination only for the managers under the low status job condition. The managers preferred to hire the young applicant for the accounts clerk job and were not willing to hire the old applicant for this job. At the same time, there was also evidence of "reverse discrimination" or "reverse preference". The students under the high status job condition preferred the old applicant. They were not willing to hire the young applicant for the management position.

2. The Effect of Information Exposure

The second issue concerns the effect of information exposure on the

Table 16 Overall Mean Ratings given by Managers and Students for the Decision Dimensions *

DECISION DIMENSIONS	SUBJECTS			
	MANAGERS		STUDENTS	
	JOB STATUS			
	LOW	HIGH	LOW	HIGH
SUITABILITY	12.54 (8.55)	13.72 (5.00)	14.40 (5.98)	15.13 (4.71)
FIT IN	3.64 (1.61)	4.49 (1.16)	4.24 (1.38)	4.70 (1.26)
SUCCESS	4.02 (1.89)	4.61 (1.12)	4.69 (1.56)	4.88 (1.22)
COMPETENCE	5.72 (1.20)	4.84 (1.00)	5.50 (1.13)	5.08 (1.17)
STARTING SALARY	5.98 (1.40)	4.92 (2.04)	5.78 (1.34)	4.63 (1.92)
HIRE	4.84 (2.91)	3.46 (2.98)	4.63 (2.95)	3.67 (3.00)

* Standard deviations are given in brackets.

Table 17 Summary of the Decision Making Questionnaire Results

SAMPLE	INFORMATION			
	NEUTRAL		AGE-RELATED	
	JOB STATUS			
	LOW	HIGH	LOW	HIGH
<hr/>				
<u>MANAGERS</u>	YOUNG		OLD	
PERFORMANCE EVALUATIONS	Suitability only		Competence only	
<hr/>				
HIRE	YOUNG M= 3.18 ** (Old= 5.80)		OLD M= 3.73 (Young= 5.50)	
<hr/>				
<u>STUDENTS</u>	OLD		YOUNG	YOUNG
PERFORMANCE EVALUATIONS	(All)		(except start salary and success)	(Fit in) OLD (start salary)
<hr/>				
HIRE	OLD M= 1.80 (Young M= 4.72)		YOUNG M= 4.00 (Old M=5.62)	YOUNG M= 2.94 (Old M= 5.62)

Capitals indicate the applicant subjects preferred to hire

* Blanks indicate no differences in ratings for both applicants

** Means given for the hire dimension only

employment interview. In order to examine the effects of age-related information exposure on selection interview ratings, it is necessary to compare the hire decisions in the neutral and information exposure conditions. Again, results will be presented separately for the managers and students.

Managerial Sample - Study One

i) Low Status Job (Accounts Clerk) :

Age-related information had a significant positive effect on managers' ratings of the old applicant. The means obtained were 5.80 for the neutral condition, and 3.73 for the age-related information condition, $t(24) = 1.86$, $p < .05$. But, information exposure had a significant negative effect on ratings of the young applicant. The means were 3.18 for the neutral condition and 5.50 for the age-related condition, $t(33) = -2.32$, $p < .05$. Thus, without information exposure, the managers were keen to employ the old applicant as accounts clerk, but did not want to employ the young applicant.

ii) High Status Job (Finance Manager) :

Age-related information exposure had no effect on ratings of both the young applicant and the old applicant. The mean ratings obtained for the young applicant were 4.27 for the neutral condition and 4.00 for the age-related information condition, $t(33) = .24$, n.s; and 2.60 and 2.64 for the old applicant respectively, $t(24) = .04$, n.s. The managers had no hire preferences.

The results indicate that the information manipulation had a very strong, pervasive effect on the managers in the low status job condition. Under age-related information exposure the managers, in effect, reversed their previous hire decisions (in favour of the young applicant for the clerk's job) and instead preferred to hire the older applicant.

Student Sample - Study Two

i) Low Status Job (Accounts Clerk) :

Age-related information exposure had a significant negative effect on students' ratings of the old applicant for the clerk's job. The mean ratings obtained were 4.60 for the neutral condition, and 5.62 for the age-related information condition, $t(53) = -1.85, p < .05$. Under information exposure, the students actually rated the older applicant lower than they did with no information exposure. In other words, without information exposure they were prepared to hire the old applicant, but with information exposure they were not. However, the age-related information exposure had no effect on students' ratings of the young applicant ($M = 4.00$ for the neutral condition and 5.62 for the age-related information condition), $t(61) = .95, n.s.$

ii) High Status Job (Finance Manager) :

Age-related information exposure had a significant negative effect on students' ratings of the old applicant. The mean ratings obtained were 1.80 in the neutral condition and 5.62 in the age-related information condition, $t(54) = -6.26, p < .01$. In contrast, the age-related information exposure had a significant positive effect on students' ratings of the young applicant. The mean ratings were 4.72 for the neutral condition and 2.94 for the age-related condition, $t(61) = 2.51, p < .01$. In the information exposure condition, the students were willing to employ the young applicant for the manager's job, but they did not want to employ the older applicant.

The above results indicate that the information manipulation did not work as predicted for the students in either job status condition. In fact, they reacted against the age-related information, by making increasingly favourable hire decisions concerning the young candidate, and increasingly unfavourable hire decisions concerning the old applicant. Overall, therefore, the information manipulation did affect the selection interview ratings of both the students and the managers, but in different ways. Despite

the lack of an Information main effect, the t-test results indicate that the age-related information had a significant negative effect on the students' ratings of the old applicant, causing them to prefer to hire the young applicant. But, it had a positive, facilitative effect on the managers' hire decisions, causing them to prefer the old applicant over the young.

3. The Effect of Job Status

The third issue identified in Table 17 concerns the effect of job status on employment interviews. The MANOVA main effect for Status was highly significant in both studies, indicating that selection interview ratings are affected by the status of the job. The results of the t-tests for independent samples also support this finding. Significant differences were found between the neutral and information exposure conditions.

Managerial Sample - Study One

i) Low Status Job (Accounts Clerk) :

For the accounts clerk job, the results varied according to the type of information exposure. In the neutral condition, the young applicant was more likely to be hired ($\bar{M} = 3.18$) than the older applicant ($\bar{M} = 5.80$), $t(24) = -2.40$, $p < .05$. But, in the information exposure condition, the old applicant was more likely to be hired ($\bar{M} = 3.73$) than the young applicant ($\bar{M} = 5.50$), $t(33) = 1.75$, $p < .05$.

ii) High Status Job (Finance Manager) :

For the manager's job, both the young applicant ($\bar{M} = 4.27$) and the old applicant ($\bar{M} = 2.60$) were equally preferred under the neutral condition, $t(24) = 1.43$, n.s. and under the information exposure condition ($\bar{M} = 4.00$ and 2.64 respectively), $t(33) = 1.26$, n.s. In other words, both candidates were equally likely to be selected for the management position.

Student Sample - Study Two

i) Low Status Job (Accounts Clerk) :

For the accounts clerk's job, the students rated both applicants equally (\underline{M} = 4.52 and 4.60 for the young applicant and the old applicant respectively) following neutral exposure, $t(57) = -.10$, n.s. However, following information exposure, the students preferred to hire the young applicant (\underline{M} = 4.00) rather than the old applicant (\underline{M} = 5.62), $t(57) = -2.13$, $p < .01$.

ii) High Status Job (Finance Manager) :

For the manager's job, again the results depended upon the type of information subjects were exposed to. In the neutral condition, the old applicant was more likely to be hired (\underline{M} = 1.80) than the younger applicant (\underline{M} = 4.72), $t(57) = 4.36$, $p < .01$. But, in the information exposure condition, the reverse was found. The young applicant was more likely to be hired (\underline{M} = 2.94) than the old applicant (\underline{M} = 5.62), $t(58) = -3.72$, $p < .01$.

The above results indicate that job status affected the selection interview ratings of both the students and the managers. They rated the job applicants differently depending on the job they were applying for. These results also suggest that both samples behaved very differently in the selection interview setting (see Table 17).

4. Consistency of Ratings

The fourth issue identified in Table 17 refers to the correspondence or consistency between the performance evaluation ratings and the hire decision ratings. By examining the two sets of results for the different information and status conditions, it is possible to determine whether or not subjects were acting consistently. Interestingly, the student sample appears to be more consistent in their ratings than the managerial sample. In each of the four treatment conditions, their hire decisions reflected their

Table 18

Mean Ratings given by Managers for the Importance Dimension of Clothing*

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	5.09 (1.22) (n=11)	5.82 (.98) (n=11)
	AGE-RELATED	3.92 (1.41) (n=24)	4.46 (1.44) (n=24)
OLD	NEUTRAL	4.40 (.91) (n=15)	5.20 (1.01) (n=15)
	AGE-RELATED	4.91 (1.04) (n=11)	5.27 (1.10) (n=11)

* Standard deviations are given in brackets

Table 19

Mean Ratings given by Managers for the Importance Dimension of Physical Attractiveness *

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	3.46 (1.29) (n=11)	3.46 (1.64) (n=11)
	AGE-RELATED	3.04 (1.57) (n=24)	3.00 (1.59) (n=24)
OLD	NEUTRAL	3.20 (1.15) (n=15)	3.93 (1.22) (n=15)
	AGE-RELATED	3.46 (1.29) (n=11)	3.64 (1.43) (n=11)

* Standard deviations are given in brackets

Table 20

Mean Ratings given by Managers for the Importance Dimension of Qualifications*

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	5.64 (.81) (n=11)	6.18 (.75) (n=11)
	AGE-RELATED	5.38 (1.44) (n=24)	6.08 (1.21) (n=24)
OLD	NEUTRAL	5.67 (1.05) (n=15)	6.40 (.83) (n=15)
	AGE-RELATED	6.00 (1.10) (n=11)	6.36 (.67) (n=11)

* Standard deviations are given in brackets

Table 21

Mean Ratings given by Managers for the Importance Dimension of Body Language*

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	4.46 (1.21) (n=11)	4.82 (1.08) (n=11)
	AGE-RELATED	4.63 (1.17) (n=24)	4.54 (1.50) (n=24)
OLD	NEUTRAL	4.40 (1.35) (n=15)	4.80 (.86) (n=15)
	AGE-RELATED	4.73 (.91) (n=11)	5.27 (1.19) (n=11)

* Standard deviations are given in brackets

Table 22

Mean Ratings given by Managers for the Importance Dimension of Age*

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	3.36 (1.86) (n=11)	3.73 (1.68) (n=11)
	AGE-RELATED	2.54 (1.35) (n=24)	3.04 (1.30) (n=24)
OLD	NEUTRAL	3.33 (1.18) (n=15)	4.07 (1.44) (n=15)
	AGE-RELATED	3.36 (1.29) (n=11)	3.18 (1.25) (n=11)

* Standard deviations are given in brackets

Table 23

Mean Ratings given by Managers for the Importance Dimension of Experience*

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	5.46 (1.29) (n=11)	5.55 (1.04) (n=11)
	AGE-RELATED	5.71 (1.43) (n=24)	6.29 (.69) (n=24)
OLD	NEUTRAL	5.07 (1.49) (n=15)	5.87 (.99) (n=15)
	AGE-RELATED	5.91 (1.04) (n=11)	6.09 (.94) (n=11)

* Standard deviations are given in brackets

TABLE 24 Overall Mean Ratings given by Managers and Students for the Importance Dimensions **

IMPORTANCE DIMENSIONS	SUBJECTS			
	MANAGERS		STUDENTS	
	JOB STATUS			
	LOW	HIGH	LOW	HIGH
CLOTHING	*4 4.42 (1.41)	*3 4.75 (1.40)	*4 4.42 (1.27)	*3 5.03 (1.29)
PHYSICAL ATTRACTIVENESS	*6 2.85 (1.33)	*6 3.21 (1.41)	*5 3.23 (1.36)	*6 3.43 (1.50)
QUALIFICATIONS	*1 5.84 (1.10)	*1 6.06 (1.81)	*1 5.61 (1.19)	*1 6.23 (.96)
BODY LANGUAGE	*3 4.38 (1.57)	*4 4.73 (1.52)	*3 4.56 (1.16)	*4 4.79 (1.24)
AGE	*5 4.20 (1.45)	*5 4.40 (1.28)	*6 3.03 (1.43)	*5 3.44 (1.43)
EXPERIENCE	*2 5.36 (1.38)	*2 5.85 (1.28)	*2 5.54 (1.36)	*2 6.02 (.90)

* Importance ranking

** Standard deviations are given in brackets

performance evaluations (see Table 17). The managerial sample was consistent in ratings under the neutral condition, but was inconsistent under the information exposure condition. Overall, however, the general trend was towards consistency.

3.3 The Importance Rating Scale Analysis

Managerial Sample - Study One

The mean ratings for each of the importance dimensions are presented in Tables 18 to 23, for the eight treatment conditions. The six importance dimensions were the same as those used in the student study - clothing, physical attractiveness, qualifications, body language, age and experience.

INSERT TABLES 18-23 ABOUT HERE

A $2 \times 2 \times 2 \times 6$ (Age \times Information \times Status \times Importance Dimensions) MANOVA with repeated measures on the last two factors and unequal cell sizes was carried out on the data (see Appendix G). The main effect for Status was significant ($F(1,57) = 7.42, p < .001$). The MANOVA results further indicate significant status effects for the importance rating dimensions of clothing ($F(1,57) = 29.74, p < .01$); qualifications ($F(1,57) = 13.38, p < .001$); and experience ($F(1,57) = 6.36, p < .05$). The main effects for Age and Information were not significant, ($F(1,57) = .62$ n.s) and ($F(1,57) = 2.05$ n.s.) respectively. None of the interactions were significant.

INSERT TABLE 24 ABOUT HERE

The importance rating scale was used to assess the importance subjects placed on the different factors involved in their selection decisions. The purpose was to examine whether the factors subjects considered important were reflected in their actual selection decisions. By examining the means,

it is possible to get an overall importance rating for each factor. These ratings are presented in Table 24. Results are presented separately for the low and high status positions, due to the MANOVA main effect for Status. The number in the top left-hand corner represents the ranking of each factor from '1' (the most important factor) to '6' (the least important factor).

As shown in Table 24, the dimension of 'qualifications' was rated as the most important factor in both cases. 'Experience' was rated as the second most important factor in both cases. The factor of 'age' was of particular interest in this study. Did subjects consider applicant age to be important in their selection decisions? The overall means suggest that subjects did not consider applicant age as an important factor. For the managers under low status job condition age was rated as the least important factor ($\bar{M} = 3.03$). This finding is very interesting as it contrasts directly with the results of the managers' DMQ. This result will be discussed in more detail in the discussion section. Under the high status job condition, age was rated as the fifth most important factor ($\bar{M} = 3.44$).

Student Sample - Study Two

Tables 25 to 30 present the mean importance ratings for each of the six factors - clothing, physical attractiveness, qualifications, body language, age and experience.

INSERT TABLES 25-30 ABOUT HERE

A $2 \times 2 \times 2 \times 6$ (Age x Information Exposure x Job Status x Importance dimensions) MANOVA with repeated measures on the last two factors and unequal cell sizes was performed on the data (see Appendix G). The main effect for Job Status was significant ($F(1,115) = 7.63, p < .001$). The MANOVA results further indicate significant status effects for five of the importance

TABLE 25

Mean ratings given by Students for the Importance Dimension of Clothing *

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	4.14 (1.46) (n=29)	4.35 (1.45) (n=29)
	AGE-RELATED	4.71 (1.40) (n=34)	4.97 (1.34) (n=34)
OLD	NEUTRAL	4.37 (1.30) (n= 30)	4.80 (1.35) (n= 30)
	AGE-RELATED	4.42 (1.50) (n= 26)	4.85 (1.46) (n= 26)

* Standard deviations are given in brackets

TABLE 26

Mean ratings given by Students for the Importance Dimension of Physical Attractiveness *

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	2.62 (1.55) (n=29)	2.83 (1.44) (n=29)
	AGE-RELATED	3.06 (1.37) (n=34)	3.44 (1.24) (n=34)
OLD	NEUTRAL	2.90 (1.16) (n= 30)	3.33 (1.32) (n= 30)
	AGE-RELATED	2.77 (1.31) (n= 26)	3.19 (1.65) (n= 26)

* Standard deviations are given in brackets

TABLE 27

Mean ratings given by Students for the Importance Dimension of Qualifications*

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	5.38 (1.64) (n=29)	5.62 (1.64) (n=29)
	AGE-RELATED	6.24 (.65) (n=34)	6.41 (.74) (n=34)
OLD	NEUTRAL	6.03 (.89) (n= 30)	6.13 (1.14) (n= 30)
	AGE-RELATED	5.62 (.80) (n= 26)	6.00 (.98) (n= 26)

* Standard deviations are given in brackets

TABLE 28

Mean ratings given by Students for the Importance Dimension of Body Language*

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	4.17 (1.98) (n=29)	4.69 (1.82) (n=29)
	AGE-RELATED	4.62 (1.60) (n=34)	5.00 (1.54) (n=34)
OLD	NEUTRAL	4.30 (1.29) (n= 30)	4.43 (1.41) (n= 30)
	AGE-RELATED	4.39 (1.36) (n= 26)	4.77 (1.28) (n= 26)

* Standard deviations are given in brackets

TABLE 29

Mean ratings given by Students for the Importance Dimension of Age*

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	4.00 (1.34) (n=29)	4.24 (1.35) (n=29)
	AGE-RELATED	3.74 (1.31) (n=34)	4.29 (1.49) (n=34)
OLD	NEUTRAL	4.53 (1.28) (n= 30)	4.60 (1.43) (n= 30)
	AGE-RELATED	4.65 (1.77) (n= 26)	4.50 (1.36) (n= 26)

* Standard deviations are given in brackets

TABLE 30

Mean ratings given by Students for the Importance Dimension of Experience *

AGE	INFORMATION	JOB STATUS	
		LOW	HIGH
YOUNG	NEUTRAL	5.10 (1.61) (n=29)	5.31 (1.56) (n=29)
	AGE-RELATED	5.65 (.92) (n=34)	6.09 (1.06) (n=34)
OLD	NEUTRAL	5.70 (1.24) (n= 30)	6.30 (1.09) (n= 30)
	AGE-RELATED	4.89 (1.61) (n= 26)	5.62 (1.20) (n= 26)

* Standard deviations are given in brackets

dimensions: clothing ($F(1,115) = 17.99, p < .01$); physical attractiveness $F(1,115) = 12.25, p < .001$; qualifications ($F(1,115) = 7.11, p < .01$); body language ($F(1,115) = 12.63, p < .001$); and experience ($F(1,115) = 24.50, p < .001$). The main effect for Age was not significant ($F(1,115) = .78$ n.s.). However, there was a significant age effect for the importance dimension of age ($F(1,115) = 4.41, p < .05$). The main effect for Information Exposure was also not significant ($F(1,115) = 1.52$ n.s.).

The MANOVA results further indicate a significant Age \times Information interaction, ($F(1,115) = 2.72, p < .05$). Significant results were found for the importance dimensions of qualifications ($F(1,115) = 8.75, p < .01$) and experience ($F(1,115) = 10.63, p < .001$). The overall Age \times Status interaction was not significant ($F(1,115) = .11, n.s.$), but a significant result was obtained for the importance dimension of age ($F(1,115) = 4.67, p < .05$). No other significant interactions were found.

Overall mean importance ratings were calculated for the students' IRS. These means are also presented in Table 24. As for the managers, the students rated the dimension of 'qualifications' as the most important factor. 'Experience' was rated as the second most important factor. The students also rated age as unimportant. They rated age as the fifth most important factor for both the low status position, ($M = 4.20$) and the high status position ($M = 4.40$). The only factor which was rated lower was 'physical attractiveness'.

CHAPTER FOUR

Discussion

The results of this research provide empirical support for all of the hypotheses. It was found that selection interview ratings were affected by the age of the applicant (Hypothesis 1). It was also shown that information exposure (Hypothesis 2) and job status (Hypothesis 3), both interacted with applicant age to affect selection interview ratings. The final hypothesis (Hypothesis 4) postulated that the findings of the student sample would not be generalisable to the managerial sample. This hypothesis was also supported. The results did not generalise from the students to the managers.

Results will be discussed in three sections. The data from both studies will be interpreted in light of the hypotheses and discussed in relation to the previous literature. Conclusions and wider implications of the research will then be discussed. Finally, limitations of the present design and suggestions for future research will be considered.

4.1 Overview of Results

Managerial Sample - Study One

The Effect of Applicant Age

The first hypothesis predicted that the age of the job applicant would have a significant effect on selection interview decisions. This hypothesis was supported by the present results. The managers had no applicant preferences for the management job, but were not willing to hire the old applicant for the clerk's job. This finding provides direct evidence of discrimination against the old applicant. It also replicates the results of

previous investigations in this area (Craft et al., 1979; Haefner, 1977; Triandis, 1963). The consistent finding is that older job applicants are discriminated against in employment interviews.

Triandis (1963) examined the factors affecting employee selection in four subject samples. He found that applicant age was important for all groups. Specifically, students and managers did not want to hire the old applicant for the low status job. A similar result was reported by Haefner (1977). Haefner found that managers preferred to hire young, competent male applicants. They did not want to hire women, older workers or barely-competent applicants. Craft et al., (1979) also found positive evidence of age bias in the selection process. Subjects (graduate business students) were not willing to hire older job candidates, on the basis of their age.

Evidence suggests that negative stereotypes, associated with increased age, lead to inaccurate predictions of the work performance and "employability" of older employees. Waldman and Avolio (1986) carried out a meta-analysis of 40 studies reporting data pertaining to the relationship between age and job performance. The authors concluded that, as age increased, job performance (as measured on a number of productivity indices) increased also. Two further empirical studies (Kutscher & Walker, 1960; Schwab & Heneman, 1979b) also provided positive or non-significant age/job performance relationships, when job tenure was controlled. In Kutscher and Walker's (1960) study, work output rates were almost the same across six age groups ranging from less than 25 years to 65 years and above. Schwab and Heneman (1979b) reported a positive correlation between age and performance for piece-rate workers.

These studies suggest that the widespread belief that work performance declines as age increases is incorrect and misleading. Negative stereotyping of aged employees, as found in the managerial study, is based on biased

attitudes and false perceptions. This finding is also consistent with the research on the relationship between age and performance evaluations (Cleveland & Landy, 1983a; Lee & Clemons, 1985; Rosen and Jerdee, 1976a, 1976b, 1977). In all decisions relating to training, promotion and salaries, older employees received less favourable ratings.

The Effect of Information Exposure

On the basis of previous investigations in the sex discrimination literature (e.g., Heilman, 1983; Heilman & Martell, 1986; Heilman & Stopeck, 1985), it was expected that age-related information exposure would interact with age to affect selection interview decisions. This hypothesis was supported by the data. Although the main effect and interaction effects were not significant, further analyses indicate that information was important. Overall, the information manipulation had a powerful effect on managers' selection decision ratings of the old applicant. This finding suggests that, as experienced interviewers, the managers were sensitive to information which disputed traditional selection biases. In fact, the information manipulation affected the managers' judgements to such a degree that, after information exposure, they refused to consider the young applicant for either position.

To date, no other age research has directly investigated the effect of information exposure on selection decisions. However, this finding is consistent with the results of the previous gender literature on the effects of information on selection decisions (Heilman & Martell, 1986) and performance evaluations (Heilman & Stopeck, 1985). Heilman and Martell (1986) found that exposure to information about a group of successful women reduced subsequent sex discrimination in selection decisions. Heilman and Stopeck (1985) also found that exposure to positive information about women improved the performance evaluations given to

female employees. This information had a positive effect on subjects' reactions towards women, by reducing the impact of traditional stereotypes and decreasing discriminatory judgements.

This finding may be explained as the result of the limited conditions under which information exposure is effective. Heilman and Martell (1986) concluded that exposure to information about successful women mitigated against sex stereotyping and bias only when the information was perceived as being both relevant and representative of women, in general. The present finding suggests that the managers were affected by the age-related information as predicted. The age-related story, pertaining to the finance/business sector had a direct connection with the occupation about which a selection decision was being made. This story also documented a group of successful older workers, not a solo one. As a result, the information carried over to their stereotypic beliefs about older workers.

For the student sample, the reverse effect was found. Although the main effect and interaction effects for information were not significant, further analyses indicated that the information manipulation had a powerful, negative effect on the students' selection decisions ratings of the older applicant. The age-related story, which was designed to deter subsequent age stereotyping and discrimination in the interview, actually increased students' discriminatory reactions towards the older applicant.

This result can be explained using the notion of "Psychological Reactance" (Brehm, 1966). Brehm suggested that most individuals believe they are responsible for their own behaviour. They do not like being forced to do something, and they react by trying to reassert their freedom. As a result, people will often behave in exactly the opposite way to what is demanded of them. Worschel and Brehm (1971) have shown that, when subjects were forced to do something by an experimental confederate, they preferred the

alternative option.

Further empirical support for the theory of Psychological Reactance comes from the discrimination research. Reese (1973) carried out a study investigating the effects of police training on racial prejudice. Subjects were all white, American police officers undergoing training in community relations and interpersonal communication. Reese believed the training would lead to an improvement in the officers' attitudes towards Negroes. Contrary to predictions, he found evidence of adverse attitudinal changes after training. It appeared that the subjects reacted against the information they received in the training sessions and discriminated further against Negroes.

In the present study, a parallel can be drawn with the students' responses. The students reacted against the positive information about older employees, and discriminated against the old applicant. One possible reason for this reaction is based on the age of the rater. Cleveland and Landy (1981) examined the influence of rater and ratee age on performance evaluations. They found small but significant age effects on the job performance measures, suggesting that rater age is important. This issue has not been addressed before in selection research. However, the students in the present study were, on average, considerably younger than the managers (average age of 20 years compared with 33 years). As a result, they may have felt the need to protect their positions. They did not want to believe that they would be competing against older workers in the job market.

The Effect of Job Status

Hypothesis three predicted that job status would interact with age to affect selection interview decisions (Triandis, 1963). This hypothesis was supported in the present findings. Job status had a significant main effect on

interview decisions. However, further analyses indicate that job status also interacted with applicant age. The managerial subjects were not willing to hire the old applicant for the low status job of accounts clerk, but they ignored the factor of age in their hire decisions for the high status position of finance manager. This finding replicates the results of the earlier study by Triandis (1963). Triandis also found that job status interacted with age in subjects' selection decisions. Again, age was an important factor for the low status job, but was ignored for the high status job. However, it is difficult to draw comparisons between these two studies because of the problems pointed out earlier with Triandis' job status levels.

Student Sample - Study Two

The Issue of Generalisability

Recent investigations of the generalisability of results from student samples in selection research (e.g., Barr & Hitt, 1986; Gordon, Slade & Schmitt, 1986; Guion, 1983; Landy & Bates, 1973; Oakes, 1972), suggest that there is a very real threat to generalisability in using students. Hypothesis four predicted that the results of the student sample in study two would not generalise to the managerial sample in study one. This hypothesis was supported by the present data. The results indicate a number of significant differences between the two samples, across age, information and job status conditions. This finding supports the conclusion that the students and the managers behaved very differently in the interview context.

Several researchers have examined the effect of applicant age on performance evaluations and selection decisions. The majority of these studies employed student samples only (Connor et. al., 1978; Craft et.al., 1979; Fusilier & Hitt, 1983; Lee and Clemons, 1985; Rosen and Jerdee, 1976b). Four studies used managerial samples only (Arvey et al., 1987; Cleveland &

Landy, 1983a; Haefner, 1977; Rosen & Jerdee, 1977). The remaining two studies (Rosen & Jerdee, 1976a; Triandis, 1963) employed both managers and students. However, only one of these studies (Triandis, 1963) has addressed the issue of external validity and this study was carried out 25 years ago.

Triandis (1963) compared the selection decisions of four subject samples - American students, American personnel managers, Greek students and Greek personnel managers. He concluded, " (the results) suggest that judgements of employability are highly consistent across cultures and experiences with employee selection (student versus personnel manager)" (Triandis, 1963 p.91). The present finding does not replicate this result. Instead, between-sample generalisability is not supported. The present study has, therefore, made a unique contribution to this important and very current methodological debate.

The Importance Ratings

The importance ratings were included to assess the importance subjects placed on the different variables involved in their selection decisions. Despite an accumulation of research on the employment interview, very little is known about the variables and characteristics that recruiters base their selection decisions on. Kinicki and Lockwood (1985) have shown that interviewers tend to base their selection decisions on subjective "impressionistic" factors, such as physical attractiveness and interview impression, rather than more objective, job-relevant information, such as qualifications and previous work experience.

In the present research, for both samples, qualifications and experience were rated as the two most important factors in employee selection. Physical attractiveness was given little consideration, as was applicant age. This result is interesting because it is inconsistent with the subjects' actual selection decisions in the DMQ. For both samples, the MANOVA or t-test

results indicate that applicant age was important in their selection decisions. One particularly interesting finding is for the managers in the low status/neutral condition. Under this condition, the managers considered applicant age to be the least important factor. However, it was under this condition that the managers discriminated against the older applicant.

The present finding replicates the results reported by Kinicki and Lockwood (1985). A similar result was also reported by Eder (1986) for the factor of applicant race. It appears that subjects do not base their interview decisions upon the factors which they claim they do. Instead, job-irrelevant factors play a substantial role in personnel selection. This finding is relevant in light of the current concern over fairness in selection procedures.

4.2 Conclusions and Implications

The findings of the present research support several conclusions :

1. Applicant age affected selection interview ratings.
2. Age-related information interacted with age to affect selection interview ratings.
3. Job status affected selection interview ratings.
4. The findings of the student sample were not generalisable to the managerial sample.
5. Subjects tended to base their selection decisions upon job-irrelevant factors rather than job-relevant factors.

Implications

A number of practical and theoretical implications can be drawn from this research. Selection fairness continues to be one of the most crucial issues in personnel psychology. With increasing numbers of "old" people in the population, the problem of ageism in employee selection will become an even greater concern to gerontologists and organisational researchers. The present research has made a unique contribution to this issue. The findings indicate that recruiters do discriminate on the grounds of age. The majority of research on bias in the employment interview has focused on the issues of race and sex. For this reason, very little is known about the legal and organisational issues associated with age discrimination. Personnel policies and selection criteria must be reviewed for evidence of discrimination against older applicants. This is not only for legal and ethical reasons, but also because it is imperative that organisations use their personnel effectively. Similarly, interviewers need to be educated and sensitized to selection bias against older employees. Proactive, rather than reactive, selection practices must be employed to promote equal employment opportunity.

One theoretical implication for research in this area is the problem of generalisability of results from students to managers. As Gordon et al. describe, "(G)enerations of college students have toiled in university laboratories solving problems they did not create, learning syllables they have never seen before, and selecting applicants for hire in nonexistent organisations" (Gordon, Slade & Schmitt, 1986 p.191). It is no longer acceptable to assume that selection research using student samples is generalisable to real interviewers. The present study is timely in view of the recent policy adopted by a number of prestigious psychological journals (Journal of Applied Psychology, Academy of Management Review, Personnel Psychology, Administrative Science Quarterly, Organisational Behaviour and Human Performance) refusing to publish articles based only

on student samples. As Guion (1983) pointed out in his editorial comment for the *Journal of Applied Psychology* (p. 548), "A study of the judgements of college sophomores . . . may make a useful contribution, but it will not answer questions about the ways decision makers in real organisations make judgements about extended face-to-face interactions with real people". The results of the present study support this statement.

4.3 Limitations and Future Research Recommendations

The greatest problem of this study was the compromise made over the management sample. All subjects included in the managerial group were involved in management development courses. Consequently, it is not clear as to whether the results are generalisable to management personnel who are not involved in further training. However, this problem does not have to be considered a disadvantage. Insight has been gained as to the decision making processes these individuals employed in their selection decisions.

A second methodological limitation concerns the relatively small sample size in study one ($N = 61$). As a result, the present findings should be interpreted with some caution. A larger sample size would also control for sex of participants. A further problem concerning the generalisability of the present findings is the inclusion of only one 'young' applicant and one 'old' applicant. In further studies of this nature, it may be more appropriate to use at least three different age levels. Finally, the between-subjects design did not allow direct comparisons to be made between the neutral and information exposure conditions. One must therefore, make the assumption that the baseline is the same for different subjects. A within-subjects design would overcome this problem.

Future Research

Research on age discrimination in employment is sorely lacking. A number of areas for future research can be identified from these studies. Firstly, the questionnaire items in the present methodology were a priori. This means that they were decided upon by the author before the experiment took place. A different methodology could be used involving open-ended interviews with personnel managers and interviewers to determine their views of aged employees. A similar methodology could also be employed to consider both age and sex discrimination in selection interviews. This would involve a comparison of male and female applicants (young male, old male, young female, old female).

As suggested above, future studies of this nature should include a greater number of age categories. Furthermore, the job type or job status variable needs to be more precisely defined using a greater number of categories so that researchers can examine the exact nature of work in which selection decisions relating to older applicants may be less favourable (Waldman & Avolio, 1986). Ageism could be investigated in other selection procedures, such as psychological tests to determine whether older job candidates are disadvantaged. This study represents one step in the direction of exposing ageism and discriminatory judgements in personnel selection practices, which work to exclude individuals simply on the basis of age.

References

- Aaronson, B.S. (1966). Personality stereotypes of aging. Journal of Gerontology, 21, 458-462.
- Arvey, R.D. (1979). Fairness in selecting employees. London : Addison-Wesley Publishing Co.
- Arvey, R.D. (1979). Unfair discrimination in the employment interview : Legal and psychological aspects. Journal of Applied Psychology, 86 (4), 736-765.
- Arvey, R.D. & Campion, J.E. (1982). The employment interview : A summary and review of recent research. Personnel Psychology, 35, 281-322.
- Arvey, R.D., Miller, H.E., Gould, R. & Burch, P. (1987). Interview validity for selecting sales clerks. Personnel Psychology, 40, 1-13.
- Asch, S. (1946). Forming impressions of personality. Journal of Abnormal and Social Psychology, 41, 258-290.
- Barr, S.H. & Hitt, M.A. (1986). A comparison of selection decision models in manager versus student samples. Personnel Psychology, 39, 599-617.
- Baskett, C.D. (1973). Interview decisions as determined by competency and attitude similarity. Journal of Applied Psychology, 57, 343-345.
- Bass, B.M. (1951). Situational tests : I. Individual leader interviews compared with leaderless group discussions. Educational and Psychological Measurement, 11, 67-75.
- Baughner, D. (1978). Is the older worker inherently incompetent ? Aging and Work, 1 (Fall), 243-251.
- Bender, I.E. & Hastorf, A.H. (1950). The perception of persons : Forecasting another person's responses on three personality scales. Journal of Abnormal and Social Psychology, 45, 556-561.
- Bennett, R. & Eckman, J. (1973). Attitudes towards aging : A clinical examination of recent literature and implications for research. In C. Eisdorfer and M.P. Lawton (Eds). The Psychology of adult development and aging. Washington D.C : The American Psychological Association.
- Bernstein, V., Hakel, M.D. & Harlan, A. (1975). The college student as interviewer : A threat to generalisability ? Journal of Applied Psychology,

60 (2), 266-268.

Bolster, B. I. & Springbeet, B.M. (1961). The reaction of interviewers to favourable and unfavourable information. Journal of Applied Psychology, 45, 97-103.

Bowers, W.H. (1952). An appraisal of worker characteristics as related to age. Journal of Applied Psychology, 36, 296-300.

Brehm, J. (1966). A theory of Psychological Reactance. New York : Academic Press.

Brigham, J.C. & Barkowitz, P. (1978). "Do they all look alike?". The effect of race, sex, experience and attitudes on the ability to recognise faces. Journal of Applied Social Psychology, 8, 306-318.

Brubaker, T.H. & Powers, E.A. (1976). The stereotype of "old" : A review and alternative approach. Journal of Gerontology, 31, 441-447.

Bryne, D. (1961). Interpersonal attraction and attitude similarity. Journal of Abnormal and Social Psychology, 62, 713-715.

Carlson, R.E. (1968). Selection interview decisions : the effect of mode of applicant presentation on some outcome measures. Personnel Psychology, 21, 193-207.

Carlson, R.E. (1970). Effects of applicant sample ratings on valid information in an employment setting. Journal of Applied Psychology, 54, 217-222.

Carver, V. & Liddiard, P. (1978). An Ageing Population. Kent : The Open University Press.

Cash, T.F., Gillen, B. & Burns, D.S. (1977). Sexism and "beautyism" in personnel consultant decision-making. Journal of Applied Psychology, 62 (3), 301-310.

Chamberlain, J. (1987). One hundred years of national parks. North and South, March, 74-79.

Cleveland, J.N. & Landy, F.J. (1981). The influence of rater and ratee age on two performance judgements. Personnel Psychology, 34, 19-29.

Cleveland, J.N. & Landy, F.J. (1983a). The effects of person and job stereotypes on two personnel decisions. Journal of Applied Psychology, 68 (4), 609-619.

Cleveland, J.N. & Landy, F.J. (1987). Age perceptions of jobs :

Convergence of two questionnaires. Psychological Reports, 60 (3), 1075-1081.

Cohen, S.L. & Bunker, K.A. (1975). Subtle effects of sex role stereotypes on recruiters' hiring decisions. Journal of Applied Psychology, 60, 566-572.

Connor, C.L., Walsh, P., Litzelman, D.K. & Alvarez, M.G. (1978). Evaluation of job applicants : The effects of age versus success. Journal of Gerontology, 33 (2), 246-252.

Craft, J.A., Doctors, S.I., Shkop, Y.M. & Benecki, T.J. (1979). Simulated management perceptions, hiring decisions and age. Aging and Work, Spring, 95-102.

Crockett, W.H., Press, A.N. & Osterkamp, M. (1979). The effects of deviations from stereotyped expectations upon attitudes toward older persons. Journal of Gerontology, 34, 368-374.

Dakin, S. & Armstrong, J.S. (1988 - in press). Forecasting job performance : A comparison of expert opinion and research findings. International Journal of Forecasting.

Dallessio, A. & Imada, A.S. (1984). Relationships between interview selection decisions and perceptions of applicant similarity to an ideal employee and self : A field study. Human Relations, 37 (1), 67-80.

Dipboye, R.L., Arvey, R.D. & Tepstra, D.E. (1977). Sex and physical attractiveness of raters and applicants as determinants of resume evaluations. Journal of Applied Psychology, 62, 288-294.

Dipboye, R.L., Fromkin, H.L. & Wiback, K. (1975). Relative importance of applicant sex, attractiveness and scholastic standing in the evaluation of job applicant resumes. Journal of Applied Psychology, 60 (1), 39-43.

Doering, M., Rhodes, S.R. & Schuster, M. (1983). The Aging Worker : Research and recommendations. USA : Sage Publications, Inc.

Dunnette, M.D. & Borman, W.C. (1979). Personnel selection and classification systems. Annual Review of Psychology, 30, 477-525.

Eder, G.S. (1986). Effects of ethnicity, accent and job status on decision making in selection interviews. MSc thesis : University of Canterbury.

Faley, R.H., Kleiman, L.S. & Lengnick-Hall, M.L. (1984). Age discrimination and personnel psychology : A review and synthesis of the legal literature with implications for future research. Personnel Psychology, 37, 327-349.

Ferris, G.R. & Gilmore, D.O. (1977). Effects of mode of presentation, sex of applicant, and sex of interviewer on simulated interview decisions. Psychological Reports, 40, 566.

Fiske, S.T. & Cox, M.G. (1979). Person concepts : The effects of target familiarity and descriptive purpose on the process of describing others. Journal of Personality, 47, 136-161.

Frank, L.L. & Hackman, J.R. (1975). Effects of interviewer-interviewee similarity on interviewer objectivity in college admissions interviews. Journal of Applied Psychology, 60 (3), 356-360.

Freytag, W.R. (1976) The validity of the oral board interview in police officer selection : A comparative analysis between minority group members and white males. Unpublished manuscript, Pennsylvania State University, Applied Research laboratory.

Fusilier, M.R. & Hitt, M.A. (1983). Effects of age, race, sex, and employment experience on students' perceptions of job applicants. Perceptual and Motor Skills, 57, 1127-1134.

Ghiselli, E.E. (1966). The validity of a personnel interview. Personnel Psychology, 19, 389-395.

Giniger, S., Dispenzieri, A. & Eisenberg, J. (1983). Age, experience, and performance on speed and skill jobs in an applied setting. Journal of Applied Psychology, 68 (3), 469-475.

Glass, G.V. & Stanley, J.C. (1970). Statistical methods in education and psychology. USA.

Gordon, M.E., Slade, L.A. & Schmitt, N. (1986). The "science of the sophomore" revisited : From conjecture to empiricism. Academy of Management Review, 11 (1), 191-207.

Gorman, C.D., Clover, W.H. & Doherty, M.E. (1978). Can we learn anything about interviewing real people from interviews of paper people ? Two studies of the external validity paradigm. Organisational Behaviour and Human Performance, 22, 165-192.

Greenberg, J. (1986). Determinants of perceived fairness of performance evaluations. Journal of Applied Psychology, 71 (2), 340-342.

Greenberg, J. (1987). A taxonomy of organisational justice theories. Academy of Management Review, 12 (1), 9-22.

Greenberg, J. (in press-a). Organisational performance appraisal procedures : What makes them fair ? In M.H. Bazerman, R.J. Lewicki & B.H. Sheppard

(Eds). Research on negotiation in organisations. Greenwich, CT : JAI Press.

Greenberg, J. (in press-b). Using diaries to promote procedural justice in performance appraisals. Social Justice Review.

Guion, R.M. (1966). Employment Tests and discriminatory hiring. Industrial Relations, 5, 20-37.

Guion, R.M. (1983). Editorial : Comments from the new editor. Journal of Applied Psychology, 68, 547-551.

Guion, R.M. (1987). Changing views for personnel selection research. Personnel Psychology, 40, 199-213.

Haefner, J.E. (1977). Race, age, sex, and competence as factors in employer selection of the disadvantaged. Journal of Applied Psychology, 62 (2), 199-202.

Hakel, M.D. (1971). Similarity of post-interview trait rating inter-correlations as a contributor to inter-rater agreement in a structured employment interview. Journal of Applied Psychology, 55, 443-448.

Hakel, M.D., Hollman, T.D. & Dunnette, M.D. (1970). Accuracy of interviewers, certified public accountants, and students in identifying the interests of accountants. Journal of Applied Psychology, 54, 115-119.

Hakel, M.D., Ohnesorge, J.P. & Dunnette, M.D. (1970). Interviewer evaluations of job applicants' resumes as a function of the qualification of the immediately preceding applicants. Journal of Applied Psychology, 54, 27-30.

Hamilton, D.L. (Ed.) (1981). Cognitive processes in stereotyping and intergroup behaviour. New Jersey : Lawrence Erlbaum Associates.

Hanna, J.V. (1950). Estimating intelligence by interview. Educational and Psychological Measurement, 10, 420-430.

Heilman, M.E. (1983). Sex bias in work settings : The lack of fit model. In B. Shaw & L.L. Cummings (Eds). Research in Organisational Behaviour, 5, 269-298.

Heilman, M.E. & Martell, R.F. (1986). Exposure to successful women : Antidote to sex discrimination in applicant screening decisions. Organisational Behaviour and Human Decision Processes, 37, 376-390.

Heilman, M.E. & Stopeck, M.N. (1985). Being attractive, advantage or disadvantage ? Performance based evaluations and recommended personnel actions as a function of appearance, sex and type of job.

Organisational Behaviour and Human Decision Processes, 35, 202-215.

Hollandsworth, J.G. & Sadifer, B.A. (1979). Behavioural training for increasing effective job interview skills : Follow-up and evaluation. Journal of Counselling Psychology, 26, 448-450.

Hopper, R. (1977). Language attitudes in the employment interview. Communication Monographs, 44, 346-350.

Hopper, R. & Williams, F. (1973). Speech characteristics and employability. Speech Monographs, 40, 296-302.

Hunter, J.E. & Hunter, R.F. (1984). Validity and utility of attenuation predictions of job performance. Psychological Bulletin, 96 (1), 72-98.

Imada, A.S. & Hakel, M.D. (1977). Influence of nonverbal communication and rater proximity on impressions and decisions in simulated employment interviews. Journal of Applied Psychology, 62 (3), 295-300.

Johnson, R. & Heal, L.W. (1976). Private employment agency responses to the physically handicapped applicant in a wheelchair. Journal of Applied Rehabilitation Counselling, 7, 12-21.

Kalin, R. & Raylo, D.S. (1978). Discrimination in evaluative judgements against foreign-accented job candidates. Psychological Reports, 43, 1203-1209.

Kanfer, R., Sawyer, J., Earley, P.C. & Lind, E.A. (in press). Participation in task evaluation procedures : The effects of influential opinion expression and knowledge of evaluative criteria on attitudes and performance. Social Justice Review.

Katz, D. & Braley, K.W. (1933). Racial stereotypes of one hundred college students. Journal of Abnormal and Social Psychology, 29 (2), 280-290.

Kinicki, A.J. & Lockwood, C.A. (1985). The interview process : An examination of factors recruiters use in evaluating job applicants. Journal of Vocational Behaviour, 26, 117-125.

Kirkpatrick, J.J., Ewen, R.B., Barrett, R.S. & Katzell, R.A. (1968). Testing and fair employment : Fairness and validity of personnel tests for different ethnic groups. New York : New York University Press.

Krefting, L.A. & Brief, A.P. (1977). The impact of applicant disability on evaluative judgements in the selection process. Academy of Management Journal, 19, 675-680.

Landy, F.J., Barnes-Farrell, J.L. & Cleveland, J.N. (1980). Perceived fairness and accuracy of performance evaluation : A follow-up. Journal of Applied Psychology, 65, 355-356.

Landy, F.J., Barnes, J.L. & Murphy, K.R. (1978). Correlates of perceived fairness and accuracy of performance evaluation. Journal of Applied Psychology, 63, 751-754.

Landy, F.J. & Bates, F. (1976). Another look at contrast effects in the employment interview. Journal of Applied Psychology, 65, 422-427.

Langdale, J.A. & Weitz, J. (1973). Estimating the influence of job information on interviewer agreement. Journal of Applied Psychology, 57, 23-27.

Latham, G.P., Wexley, K.N. & Pursell, E.D. (1975). Training managers to minimize rating errors in the observation of behaviour. Journal of Applied Psychology, 60, 550-555.

Ledvinka, J. (1971). Race of interviewer and the language elaboration of black interviewees. Journal of Social Issues, 27, 185-197.

Ledvinka, J. (1972). The intrusion of race : Black responses to a white observer. Social Science Quarterly, 52, 907-920.

Ledvinka, J. (1973). Race of employment interviewer and reasons given by job seekers for leaving their jobs. Journal of Applied Psychology, 58, 362-364.

Lee, J.A. & Clemons, T. (1985). Factors affecting employment decisions about older workers. Journal of Applied Psychology, 70 (4), 785-788.

Levitin, F., Quinn, R.P. & Staines, G.L. (1971). Sex discrimination against the American working women. American Behavioral Scientist, 15, 238-254.

Lippman, W. (1922). Public Opinion. New York : Harcourt, Brace.

London, M. & Poplawski, J.R. (1976). Effects of information on stereotype development in performance appraisal and interview contexts. Journal of Applied Psychology, 62 (2), 199-205.

Lopez, F.M. (Jr.) (1966). Current problems in test performance of job applicants. Personnel Psychology, 19, 10-17.

McCann, C.D., Ostrom, T.M., Tyner, L.K. & Mitchell, M.L. (1985). Person perception in heterogeneous groups. Journal of Personality and Social Psychology, 49, 1449-1459.

- McCauley, C., Stitt, C.L. & Segal, M. (1980). Stereotyping : From prejudice to prediction. Psychological Bulletin, 87, 195-208.
- McGovern, T.V. & Howard, E.A. (1978). Interviewer evaluations of interviewee nonverbal behaviour. Journal of Vocational Behaviour, 13, 163-171.
- McTavish, D.G. (1971). Perceptions of old people : A review of research methodologies and findings. Gerontologist, 11, 90-101.
- Mayfield, E.C. (1964). A re-evaluation of published research. Personnel Psychology, 17, 239-260.
- Mayfield, E.C. & Carlson, R.E. (1966). Selection interview decisions : First results from a long-term project. Personnel Psychology, 19, 41-55.
- Mullins, T.W. (1982). Interview decisions as a function of applicant race, applicant quality, and interviewer prejudice. Personnel Psychology, 35, 163-174.
- Oakes, W. (1972). External validity and the use of real people as subjects. American Psychologist, 27, 959-962.
- Okanes, M.M. & Tschirgi, H. (1978). Impact of the face-to-face interview on prior judgements of a candidate. Perceptual and Motor Skills, 46 (1), 322- 367.
- Palmore, E.B. & Manton, K. (1973). Ageism compared to racism and sexism. Journal of Gerontology, 28, 363-369.
- Parsons, C.K. & Liden, R.C. (1984). Interviewer perceptions of applicant qualifications : A multivariate field study of demographic characteristics and nonverbal cues. Journal of Applied Psychology, 69 (4), 557-568.
- Peters, L.H., O'Connor, E.J., Weekley, J. Pooyan, A., Frank, B. & Erenkrantz, B. (1984). Sex bias and managerial evaluations : A replication and extension. Journal of Applied Psychology, 69 (2), 349-352.
- Rand, T.M. & Wexley, K.N. (1975). A demonstration of the effect "similar to me" in simulated employment interviews. Psychological Reports, 36, 535-544.
- Rasmussen, K.G. (1984). Nonverbal behaviour, verbal behaviour, resume credentials and selection interview outcomes. Journal of Applied Psychology, 69, 551-556.
- Razran, G. (1950). Ethnic dislikes and stereotypes : A laboratory study.

Journal of Abnormal and Social Psychology, 45, 7-27.

Reese, C.D. (1973). Police academy training and its effects on racial prejudice. Journal of Police Science and Administration, 1 (3), 257-268.

Reynolds, A.H. (1979). The reliability of a scored oral interview for police officers. Public Personnel Management, 8, 324-328.

Rhodes, S. (1983). Age-related differences in work attitudes and behaviour : A review and conceptual analysis. Psychological Bulletin, 93 (2), 328-367.

Rosen, B. & Jerdee, T.H. (1974). Effects of applicant's sex and difficulty of job on evaluations of candidates for management positions. Journal of Applied Psychology, 59, 511-512.

Rosen, B. & Jerdee, T.H. (1976a). The nature of job-related age stereotypes. Journal of Applied Psychology, 61 (2), 180-183.

Rosen, B. & Jerdee, T.H. (1976b). The influence of age stereotypes on managerial decisions. Journal of Applied Psychology, 61 (4), 428-432.

Rosen, B. & Jerdee, T.H. (1977). Too old or not too old. Harvard Business Review, 55, 97-106.

Rosen, B. & Mericle, M. (1979). Influence of strong versus weak fair employment policies and applicant's sex on selection decisions and salary recommendations in a management simulation. Journal of Applied Psychology, 64 (4), 435-439.

Rothstein, M. & Jackson, D.N. (1980). Decision making in the employment interview : An experimental approach. Journal of Applied Psychology, 65, 271-283.

Rowe, P.M. (1963). Individual differences in selection decisions. Journal of Applied Psychology, 47, 304-307.

Rowe, P.M. (1967). Order effects in assessment decisions. Journal of Applied Psychology, 51, 13-22.

Rowlands, K.M. & Ferris, G.R. (1982). Personnel Management. Boston : Allyn & Bacon, Inc.

Ryan, A.M. & Sackett, P.R. (1987). A survey of individual assessment practices by I/O psychologists. Personnel Psychology, 40, 455-488.

Schmitt, N. (1976). Social and situational determinants of interview decisions : Implications for the employment interview. Personnel Psychology, 29, 79-101.

- Schwab, D.P. & Heneman, H.G. III. (1978). Age stereotyping in performance appraisals. Journal of Applied Psychology, 63, 573-578.
- Secord, P.F. (1959). Stereotyping and favourableness in the perception of Negro faces. Journal of Abnormal and Social Psychology, 59, 309-315.
- Shaw, E.A. (1972). Differential impact of negative stereotyping in employee selection. Personnel Selection, 25, 333-338.
- Simas, K. & McCarrey, M. (1979). Impact of recruiter authoritarianism and applicant sex on evaluation and selection decisions in a recruitment interview analogue study. Journal of Applied Psychology, 64 (5), 483-491.
- Singer, M.S. (1986) Age stereotypes as a function of profession. Journal of Social Psychology, 126 (5), 691-692.
- Singer, M.S. (in press). Determinants of perceived fairness of selection practices.
- Stagner, R. (1985). Aging in Industry. In J.E. Birren & K.W. Schaie (Eds). Handbook of the Psychology of Aging (2nd ed.) New York : Van Nostrand Reinhold.
- Stephan, W.G. (1985). Intergroup relations. In G. Lindzey & E. Aronson (Eds). The Handbook of Social Psychology, Vol II (3rd ed.) New York : Random House.
- Stewart, R.A., Powell, G.E. & Chetwynd, S.J. (1979). Person perception and stereotyping. Westmead : Saxon House.
- Sydiaha, D. (1959). On the equivalence of clinical and statistical methods. Journal of Applied Psychology, 43, 395-401.
- Tagiuri, R. & Petrullo, L. (1958). Person perception and interpersonal behaviour. Stanford, California : Stanford University Press.
- Taylor, S.E., Fiske, S.T., Etcoff, N.L. & Ruderman, A.J. (1978). Categorical and contextual bases of person memory and stereotyping. Journal of Personality and Social Psychology, 36, 778-793.
- Terborg, J.R. & Ilgen, D.R.A. (1975). Theoretical approach to sex discrimination in traditionally masculine occupations. Organisational Behaviour and Human Performance, 13, 352-376.
- Torrington, D. & Chapman, J. (1983). Personnel Management. (2nd ed.) London : Prentice-Hall Int. Inc.

Triandis, H.C. (1963). Factors affecting employee selection in two cultures. Journal of Applied Psychology, 47 (2), 89-96.

Ulrich, L. & Trumbo, D.⁽¹⁹⁶⁵⁾ The selection interview since 1949. Psychological Bulletin, 63 (2), 100-116.

Uniform Guidelines on Employee Selection Procedures. (1978). Federal Register, 43, 38290-38314.

Wagner, R.⁽¹⁹⁴⁹⁾ The employment interview : A critical summary. Personnel Psychology, 2, 17-46.

Waldman, D.A. & Avolio, B.J. (1986). A meta-analysis of age differences in job performance. Journal of Applied Psychology, 71 (1), 33-38.

Walsh, R.P. & Connor, C.L. (1979). Old men and young women : How objectively are their skills assessed ? Journal of Gerontology, 34, 561-568.

Washburn, P.V. & Hakel, M.D. (1973). Visual cues and verbal content as influences on impressions after simulated employment interviews. Journal of Applied Psychology, 58, 137-140.

Welkowitz, J., Ewen, R.B. & Cohen, J. (1976). Introductory statistics for the Behavioral Sciences (2nd ed). New York : Academic Press.

Wexley, K.N., Fugita, S.S. & Malone, M.P. (1975). An applicant's nonverbal behaviour and student evaluators' judgements in structured interview settings. Psychological Reports, 36, 391-394.

Wexley, K.N. & Numeroff, W.F. (1974). Effects of racial prejudice, race of applicant, and biographical similarity on interviewer evaluations of job applicants. Journal of Social and Behavioural Sciences, 20, 66-78.

Wexley, K.N., Sanders, R.E. & Yukl, G.A. (1973). Training interviewers to eliminate contrast effects in employment interviews. Journal of Applied Psychology, 57, 233-236.

Wexley, K.N., Yukl, G.A., Kovacs, S.Z. & Sanders, R.E. (1972). Importance of contrast effects in employment interviews. Journal of Applied Psychology, 56, 45-48.

Wiener, Y. & Schneiderman, M.L. (1974). Use of job information as a criterion in employment decisions of interviewers. Journal of Applied Psychology, 59, 699-704.

Worschel, S. & Brehm, J. (1971). Direct and implied social restoration of freedom. Journal of Personality and Social Psychology, 18, 294-304.

Wright, O.R. (1969). Summary of research on the selection interview since 1964. Personnel Psychology, 22, 391-413.

Young, D.M. & Breier, E.G. (1977). The role of applicant nonverbal communication in the employment interview. Journal of Employment Counselling, 14, 154-165.

Appendices

APPENDIX A	Prestige Scale
APPENDIX B	Percentage Age Ratings for the Young and Old Applicant in the videotapes Mean Ratings for the five categories of Non-verbal Behaviour in the videotapes
APPENDIX C	<u>Stories</u> Introduction Neutral Story Age-Related story Questionnaire
APPENDIX D	Interview Script
APPENDIX E	<u>Decision Making Questionnaire</u> Instructions - Low Status Job Instructions - High Status Job C.V. - Young Applicant C.V.- Old Applicant DMQ - Low Status Job DMQ - High Status Job
APPENDIX F	Importance Rating Scale
APPENDIX G	<u>MANOVA Tables</u> DMQ Managers DMQ Students IRS Managers IRS Students

APPENDIX A

PRESTIGE SCALE

Please rate each of the following four jobs in terms of the level of prestige you consider appropriate. The scale is from 1-7:

- 1=very low prestige
- 2=low prestige
- 3=moderately low prestige
- 4=mild prestige
- 5=moderately high prestige
- 6=high prestige
- 7=very high prestige

A. RESEARCH OFFICER: Plans, organises and controls research and development work in conjunction with research manager, relating to development of technical processes, material utilization and research policies.

1 2 3 4 5 6 7

B. ACCOUNTS CLERK: Prepares monthly salaries and undertakes general administrative duties including day-to-day book-keeping, filing and accounts.

1 2 3 4 5 6 7

C. FINANCE MANAGER: Directs and controls all financial operations, oversees annual budgets and expenditure analyses and co-ordinates departmental and immediate subordinates.

1 2 3 4 5 6 7

D. ADMINISTRATIVE ASSISTANT: Assists with supervision and co-ordination of daily activities of workers engaged in clerical and related duties and administers office services.

1 2 3 4 5 6 7

APPENDIX B

AGE

You are about to watch two videoclips, both showing the same person being interviewed for a job. Please state how old you think the applicant looks in each case.

AGE RANGES: Below 30 years

 30 - 40 years

 Above 40 years

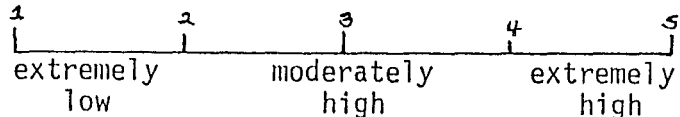
APPLICANT 1. _____

APPLICANT 2. _____

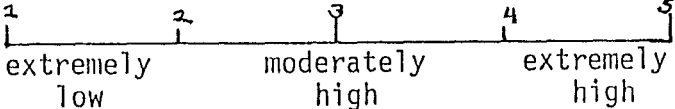
NON-VERBAL BEHAVIOUR

Rate the levels of non-verbal behaviour within the following categories:

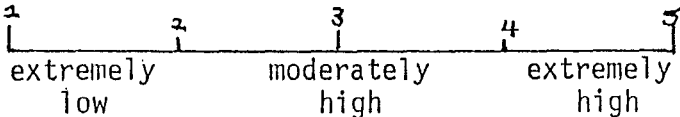
1. EYE CONTACT



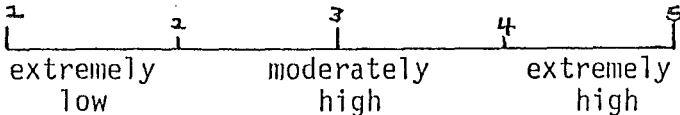
2. SMILING



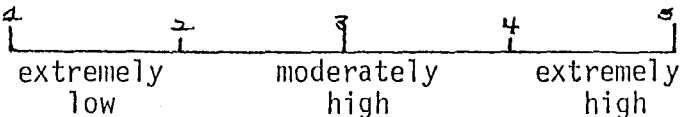
3. NODDING



4. HAND GESTURES



5. LEG MOVEMENTS



APPENDIX C

Introduction

Part One - Stories

This is a study designed to help with the selection of reading material for a future research project.

You are required to read the attached magazine article and to complete a brief questionnaire.

All responses are anonymous so there is no need to put your name on the answer sheet.

APPENDIX C - NEUTRAL STORY

100 YEARS OF NATIONAL PARKS

From a series of articles on National Parks in New Zealand

By METRO staff writer Richard Wall

1987 is the 100th anniversary of Tongariro, New Zealand's first national park. Two years of planning by a ten-member Centennial Commission will see a year of activities aimed at promoting greater public awareness of the isolation, natural beauty and scenic splendour of our eleven national parks.

While the parks may be our top overseas attraction, too many New Zealanders, especially those living in urban areas, rarely get or take the opportunity to visit them. New Zealand's parks are a crucial part of our natural heritage but as few as 15% of New Zealanders are regular park users. Christine Smith, executive officer for the National Park's Centennial Commission; Peter Mounsey (project co-ordinator); and Margaret Edridge (Commission Secretary) hope to change all that. I visited this group recently at the Commission Headquarters in Auckland to find out what I could about our country's national parks.

But first, some history. Yellowstone National Park (895,600 ha) in the north-west of Wyoming became the world's first national park in 1872. Australia and Canada quickly followed suit and New Zealand was the fourth country in the world to develop a national park system.

After Tongariro, Egmont was the second national park to be established, followed by Fiordland in 1905, Arthur's Pass in 1929, and Abel Tasman in

1942. In 1952, with the passing of the National Parks Act, the five separate bodies came together under the administration of the National Parks Authority (now the National Parks and Reserves Authority). National park land covers 2,346,290 hectares - almost one-twelfth of New Zealand's total land area.

Local park headquarters are responsible for the management, promotion and maintenance of their areas. Some park development is permitted : rangers' houses, camp grounds, huts, ski towns, car parks and roading are necessary if these areas are to be enjoyed but in "wilderness areas" nature is left untouched and access is restricted to foot tracks only.

Promoting use and preventing abuse is the unending task of the NZPRA, and the Centennial Commission's varied year-long programme will come a long way towards sensitising New Zealanders to the unspoilt beauty of the parks. Official dates for the Centennial programme are July 1st, 1987 - June 30th 1988, but a great deal is happening all around the country outside that period.

Christine Smith explains that the Centennial motto is "Parks for people". All New Zealanders (along with the tourists) will be enticed into national parks throughout the country to take part in mountain triathalons, nature walks, video sessions, barbeques, rafting races and a variety of other fun activities. The emphasis is on getting people to visit the parks and to keep returning once the celebrations are over. What a sensible way to celebrate 100 years of national parks in New Zealand.

APPENDIX C - AGE-RELATED STORY

OLD DOGS LEARN NEW TRICKS

From a series of articles on The Older Worker

METRO staff writer Richard Wall talks to a group of successful 'older' businessmen in Auckland.

In this era of high-tech business systems, computer packages and software, many companies are finding they have both systems and staff ill-equipped to face basic business problems. This has led to the emergence of a revitalised breed of businessmen able to bridge the gap between basic business principles and modern technology. The result is a modern approach to business management while still focusing on the more human-oriented work issues.

But, what kind of new industrial superperson is able to bridge this gap ? A recent Harvard Business School graduate ? Or should we look a little closer at the individuals within existing New Zealand organisations?

In Auckland recently, among the upper echelons of the world of finance, I discovered a group of enterprising 'older' men. Aged between 42 and 58 years, these men are behind a new computer-based information systems consultancy firm, called CompAge. Patrick Harris, one of the leading partners explained the philosophy behind the new enterprise : "As a group of businessmen, we have grown up within this economy and have a wealth of experience to bring to bear on the businessworld. This, coupled with the techniques of today's economic and financial operations, makes an unbeatable combination ".

Harris is a keen determined individual. At 53, he has worked his way through several financial and banking institutions to become one of the

leading entrepreneurs in this country. Leaving Auckland University in 1954 with an accounting degree, Harris began his career with Peat Marwick Chartered Accountants. Then, in 1979 he returned to university to study computing and business management. He has not looked back since then.

The idea for the 'nouvelle enterprise' came from a trip to the U.S.A. in 1984 with partner and close friend, Max King. Both Harris and King, a solicitor (aged 54), recognised the potential of combining legal, financial and computing services under one roof - a practice that has taken off in the States since the early 1980's. The two returned to New Zealand to plan their venture.

Soon, they were joined by Bob Kerr (51) and Norm Leggatt (58), both accountants who had maintained an interest in business services and consultancy work. The 'baby' of the group is Duncan Swan (42), an ex-Computer Science lecturer at Victoria University. These five men make up the management team at CompAge.

Already with a client listing of 83 companies after six months of operation, CompAge looks to be a highly successful business venture. And, Harris and his partners are enthusiastic about the work ahead of them. Harris explains that his company stands by the motto, "Using the old to bring out the best in the new". Surely a sensible approach in today's business world.

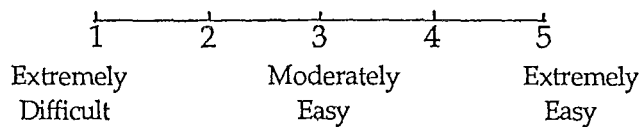
QUESTIONNAIRE - READING MATERIAL

With regards to the magazine article you have just read, please answer the following questions :

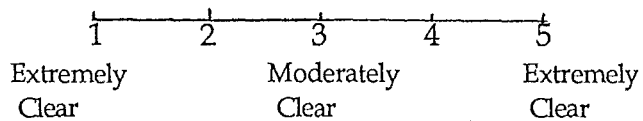
Firstly, please indicate which article you have read :

- ☐ NUCLEAR ARMS CONTROL
- ☐ CRISIS IN EDUCATION
- ☐ TRAVEL IN JAPAN
- ☐ THE OLDER WORKER
- ☐ NATIONAL PARKS IN NEW ZEALAND

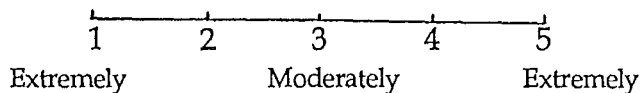
1. How difficult did you find this article to read ?



2. Rate the clarity of this article.



3. How interesting did you find this article ?



APPENDIX D

Interview Script

Interviewer : Good morning and thank you for coming, Mr Campbell. I trust you received our letter and are quite familiar with the position ?

Applicant : Yes.

Interviewer : Good. I want to begin by asking you a few questions about yourself. Firstly, how old are you ?

Applicant : I'm 25 years old (Young applicant); I'm 48 years old (Older applicant).

Interviewer : Where were you born ?

Applicant : Timaru.

Interviewer : Are you married ?

Applicant : Yes.

Interviewer : And do you have any children ?

Applicant : Yes, I have one daughter.

Interviewer : Which University did you attend ?

Interviewer : And, what degree did you gain ?

Applicant : I completed a Bachelor of Commerce with a double major in accounting and economics.

Interviewer : Now, tell me about your present job.

Applicant : Well, I've been working for Arthur Young in the auditing department, here in Christchurch, for about 18 months now. I'm responsible for carrying out audits and also act in an advisory capacity for a number of client companies.

Interviewer : And, how have you found this work ?

Applicant : I've enjoyed the contact with our clients and the financial advisory work. But, I've found the auditing work repetitive and too restricting.

Interviewer : Can you tell me why you are seeking a new position ?

Applicant : Well, I feel it's time for a change. My present position lacks autonomy and opportunities for further development. Also, I have heard a lot about this company. A good friend of mine works here in the sales department. She speaks very highly of the firm and the way things are run around here.

Interviewer : What do you think you can contribute to this job ?

Applicant : Um. (Pause). I think I can contribute to this job in several ways. Firstly, I feel that I have acquired the necessary skills and

knowledge through my university studies. Secondly, I have a great deal of experience from my previous employment. And, lastly, I enjoy meeting people and feel that I'm able to get on with individuals at all levels within an organisation.

Interviewer : What are your interests outside work ?

Applicant : I enjoy most sports, especially skiing and sailing. And, I also coach a school-boys' rugby team during winter.

Interviewer : If you were offered this position, when would you be able to start ?

Applicant : Well, I would have to give at least two weeks notice, so I could probably start within . . . (pause). . . 21 days of the offer.

Interviewer : Well, I think I have all the information that I require now. I'll finish the rest of the interviews today and will be meeting with our Branch manager tomorrow. We will let you know of our decision as soon as possible after that. Thank you very much for coming in, Mr Campbell.

Applicant : Thank you.

END

APPENDIX E

SELECTION INTERVIEW RESEARCH

Age: _____

Gender: (M = Male, F = Female) _____

Occupation: _____

Have you been involved with selection interviews before? _____

INSTRUCTIONS

This is a study investigating decision making in a job interview. You are about to watch selected parts from a videotape of a job interview which has been edited very carefully.

There are two positions to be filled - one is of Accounts Clerk and the other is of Finance Manager in a large finance corporation.

The duties of Accounts Clerk involve preparation of monthly salaries and general administrative duties including day-to-day book-keeping, filing and accounts.

The duties of Finance Manager involve directing and controlling all financial operations, overseeing annual budgets and expenditure analyses, and co-ordinating departmental and immediate subordinates.

You are to consider the applicant for both of these positions separately.

You are required first to read the curriculum vitae, watch the videotaped interview and then complete a brief questionnaire which taps in on the decision making process for investigation here.

In answering each question, put yourself in the position of the interviewer and try to answer the questions as though your decisions were actually real.

SELECTION INTERVIEW RESEARCH

Age: _____

Gender: (M = Male, F = Female) _____

Occupation: _____

Have you been involved with selection interviews before? _____

INSTRUCTIONS

This is a study investigating decision making in a job interview. You are about to watch selected parts from a videotape of a job interview which has been re-edited very carefully.

There are two positions to be filled - one is of Finance Manager and the other is of Accounts Clerk in a large finance corporation.

The duties of Finance Manager involve directing and controlling all financial operations, overseeing annual budgets and expenditure analyses, and co-ordinating departmental and immediate subordinates.

The duties of Accounts Clerk involve preparation of monthly salaries and general administrative duties including day-to-day book-keeping, filing and accounts.

Please consider the applicant for both of these positions separately.

You are required first to read the curriculum vitae, watch the videotaped interview and then complete a brief questionnaire which taps in on the decision making process under investigation here.

In answering each question, put yourself in the position of the interviewer and try to answer the questions as though your decisions were actually real.

CURRICULUM VITAE

PERSONAL

Name: Brian James Campbell
Date of Birth: 2nd November, 1962
Age: 25 years
Place of Birth: Timaru
Nationality: New Zealander
Marital Status: Married
Health: Excellent

EDUCATION

University: University of Canterbury
Bachelor of Commerce with a double major in accounting
and economics

RECENT WORK EXPERIENCE

Nov. 1985-Present: Arthur Young Chartered Accountants (Christchurch)
Auditor: duties involve auditing and advisory services
for a range of client companies.
Nov. 1984-Oct 1985: Inland Revenue Department (Christchurch).
Temporary assistant accountant.

INTERESTS:

Sailing, skiing and coaching school-boy rugby.

CURRICULUM VITAE

PERSONAL

Name: Brian James Campbell
Date of Birth: 2nd November, 1939
Age: 48 years
Place of Birth: Timaru
Nationality: New Zealander
Marital Status: Married
Health: Excellent

EDUCATION

University: University of Canterbury
Bachelor of Commerce with a double major in accounting
and economics

RECENT WORK EXPERIENCE

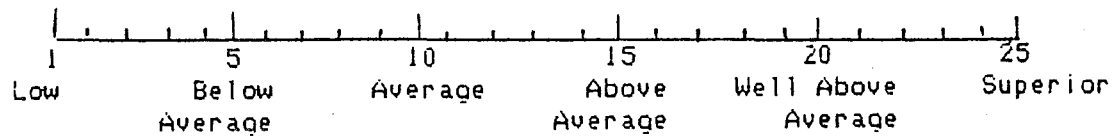
Nov. 1985- Present: Arthur Young Chartered Accountants (Christchurch)
Auditor: duties involve auditing and advisory services
for a range of client companies.
Nov. 1984- Oct. 1985: Inland Revenue Department (Christchurch)
Temporary assistant accountant.

INTERESTS: Sailing, skiing and coaching school-boy rugby.

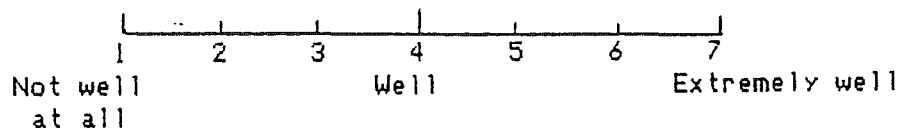
DECISION MAKING QUESTIONNAIRE

With regard to the videotaped job interview you have just watched, please go through the following rating scales.

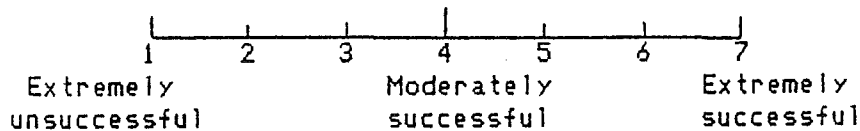
1. How suitable do you think the applicant is for employment on this job? Use the following scale. First select a 5-point range (e.g. 10-15). Then, select single point (e.g. 12) and mark it with an 'X'.



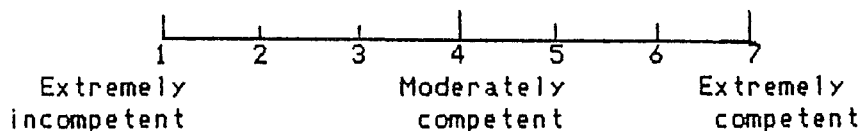
2. How well do you think the applicant would fit in with the organisation?



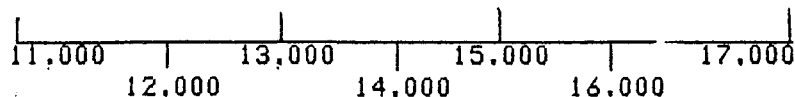
3. How successful would you expect the applicant to be in this position?



4. How competent do you think this applicant is?



5. Select the starting salary you think best suits the applicant for this job



6. Would you hire this applicant?

YES

☐

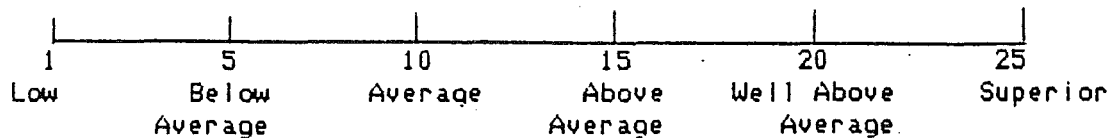
NO

☐

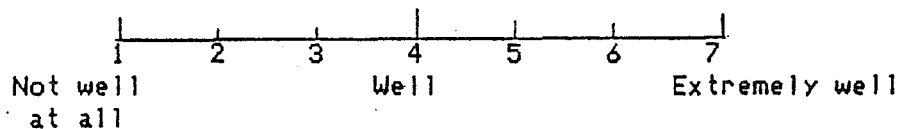
DECISION MAKING QUESTIONNAIRE

With regard to the videotaped job interview you have just watched, please go through the following rating scales.

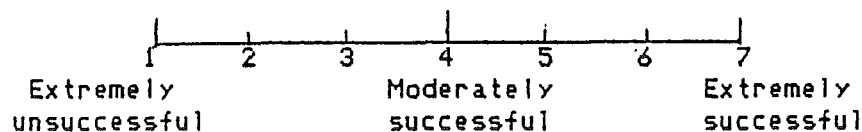
How suitable do you think the applicant is for employment on this job? Use the following scale. First select a 5-point range (e.g. 10-15). Then, select single point (e.g. 12) and mark it with an 'X'.



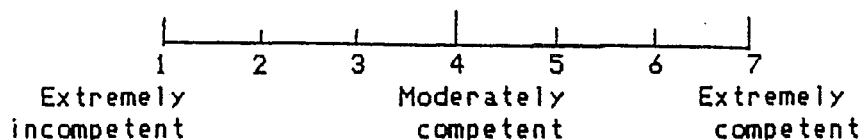
How well do you think the applicant would fit in with the organisation?



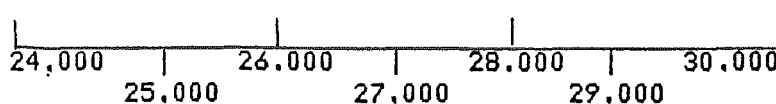
How successful would you expect the applicant to be in this position?



How competent do you think this applicant is?



Select the starting salary you think best suits the applicant for this job?



Would you hire this applicant?

YES

☐

NO

☐

APPENDIX F

IMPORTANCE RATING SCALE

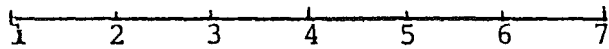
How important is each of the following factors in determining your previous judgements (from the first questionnaire) ? Use the following scale:

1=extremely unimportant

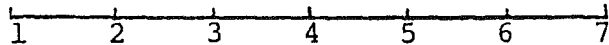
4=neutral

7=extremely important

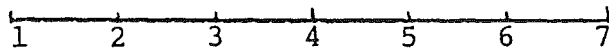
1. CLOTHING



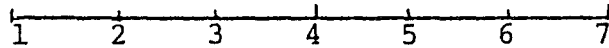
2. PHYSICAL ATTRACTIVENESS



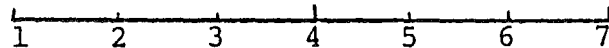
3. QUALIFICATIONS



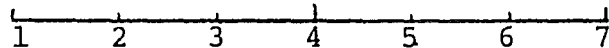
4. BODY LANGUAGE



5. AGE



6. EXPERIENCE



APPENDIX G

Manova Summary Data for the Managers' Selection Decisions

SOURCE OF VARIATION	DF	F	SIGNIF OF F
<u>MAIN EFFECTS</u>			
AGE	57	1.04	.41
INFO	57	.96	.46
STATUS	57	11.88	.001 *
<u>2-WAY INTERACTIONS</u>			
AGE INFO	57	1.44	.22
AGE STATUS	57	1.09	.38
INFO STATUS	57	.20	.97
<u>3-WAY INTERACTIONS</u>			
AGE INFO STATUS	57	.82	.56

* Statistically significant at $p < .01$

APPENDIX G

Manova Summary Data for the Students' Selection Ratings

SOURCE OF VARIATION	DF	F	SIGNIF OF F
<u>MAIN EFFECTS</u>			
AGE	115	6.07	.001*
INFO	115	1.90	.09
STATUS	115	12.46	.001 *
<u>2-WAY INTERACTIONS</u>			
AGE INFO	115	5.76	.001*
AGE STATUS	115	3.53	.01*
INFO STATUS	115	.69	.66
<u>3-WAY INTERACTIONS</u>			
AGE INFO STATUS	115	1.54	.17

* Statistically significant at $p < .01$

APPENDIX G

Manova Summary Data for the Managers' Importance Ratings

SOURCE OF VARIATION	DF	F	SIGNIF OF F
<u>MAIN EFFECTS</u>			
AGE	57	.62	.71
INFO	57	2.05	.07
STATUS	57	7.42	.000 *
<u>2-WAY INTERACTIONS</u>			
AGE INFO	57	1.12	.36
AGE STATUS	57	.89	.51
INFO STATUS	57	.56	.76
<u>3-WAY INTERACTIONS</u>			
AGE INFO STATUS	57	1.20	.32

* Statistically significant at $p < .01$

APPENDIX G

Manova Summary Data for the Students' Importance Ratings

SOURCE OF VARIATION	DF	F	SIGNIF OF F
<u>MAIN EFFECTS</u>			
AGE	115	.78	.58
INFO	115	1.15	.34
STATUS	115	7.63	.001 *
<u>2-WAY INTERACTIONS</u>			
AGE INFO	115	2.72	.05**
AGE STATUS	115	1.78	.11
INFO STATUS	115	.18	.98
<u>3-WAY INTERACTIONS</u>			
AGE INFO STATUS	115	.82	.56

* Statistically significant at $p < .01$

** Statistically significant at $p < .05$